

CERCLA EXPANDED SITE INSPECTION REPORT

· Help #

Miller F

for:

US STEEL COKING FACILITY ILD 980 704 845 LOCKPORT, ILLINOIS

PREPARED BY:
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF LAND
OFFICE OF SITE ASSESSMENT

APRIL 2, 2004

TABLE OF CONTENTS

11800 P

SECTION	PAGE
1.0 IN FRODUCTION	4
2.0 SITE BACKGROUND	4
2.1 SITE DESCRIPTION	4
2.2 SITE HISTORY	9
2.3 PREVIOUS INVESTIGATIONS	10
2.4 REGULATORY STATUS	
3.0 EXPANDED SITE INSPECTION ACTIVITIES	
3.1 SAMPLING ACTIVITIES	12
3 1.1 Soil Sampling	12
3 1.2 Sediment Sampling	
3 1.3 Surface Water Sampling	
3 1.4 Groundwater Sampling	
3.2 ANALYTICAL RESULTS	17
4.0 SITE SOURCES	
4.1 SPECIFIC SOURCES	
4.2 OTHER SOURCES NOT INVESTIGATED	
5.0 MIGRATION PATHWAYS	
5.1 Groundwater Pathway	
5.2 Surface Water Pathway	
5.3 Soil Exposure	
5.4 Sample Handling	
6.0 ANALYTICAL RESULTS	
6.1 Grounc water Sampling	
6.2 Surface Water Samplings	
6.3 Soil Sampling	
6.4 Air Route	
7.0 REFERENCES	30

FIGURES and TABLES

Table 1	Sample Descriptions
Table 2	Volatile Analysis of Soil Samples
Table 3	Semi-Volatile Analysis of Soil Samples
Table 4	Inorganic Analysis of Soil Samples
Table 5	Volatile Analysis of Waste Samples
Table 6	Semi-Volatile Analysis of Waste Samples
Table 7	Inorganic Analysis of Waste Samples
Table 3	Semi-Volatile Removal Action Levels Exceeded by Waste Samples
Table 9	Volatile Analysis of Sediment Samples
Table 10	Semi-Volatile Analysis of Sediment Samples
	Inorganic Analysis of Sediment Samples
Table 12	Volatile Analysis of Surface Water Samples
Table 13	Semi-Volatile Analysis of Surface Water Samples
Table 14	Inorganic Analysis of Surface Water Samples
Table 15	TCLP Results
Figure 1	Site Location Map
Figure 2	Site Area Map
Figure 3	Soil Sample Location Map
Figure 4	Waste Sample Location Map
Figure 5	Sediment Sample Location Map
Figure 6	Surface Water Sample Location Map

1.0 INTRODUCTION

On October 18, 2003, the Illinois Environmental Protection Agency's (Illinois EPA)

Office of Site Assessment was tasked by Region V of the United States Environmental

Protection Agency (U.S. EPA) to conduct an Expanded Site Inspection (ESI) of the US Steel

Coking facility site located in Lockport, Illinois (ILD 980 704 845). The ESI is performed under the authority of the Comprehensive Environmental Response, Compensation, and Liability

(CERCLA) commonly known as Superfund.

The purpose of the ESI is to gather additional all information necessary to develop a CERCLA Hazard Ranking System (HRS) scoring package to propose the site to the National Priorities List (NPL). To fully evaluate the site and fulfill HRS documentation requirements, the ESI should

- 1. Investigate and document critical hypotheses or assumptions not completely tested during previous investigations
- 2. Collect samples to attribute hazardous substances to site operations;
- 3. Collect samples to establish representative background levels;
- 4. Collect any other missing HRS data for pathways of concern.

2,0 SITE BACKGROUND

2.1 SITE DESCRIPTION

The US Steel Coking Facility (US Steel) site consists of approximately seventy acres located in the western portion of the city of Lockport, Will County, Illinois. The former US Steel Coking Facility was part of a steel manufacturing plant. The site is located in the western half of Section 34, Township 36 North, Range 10 East of the Third Principal Meridian (U.S. Geological Survey 1973). The site address is 2215 South State Street, Lockport, Illinois. The site is

between the Sanitary Ship Canal and the Illinois and Michigan Canal (Latitude N41⁰ 33' 0"l, longitude W88⁰ 4'0"). In the past the site has been known as Bill's Excavating (Fig. 1).

The US Steel Coking Facility was placed onto CERCLIS on July 1, 1980. This action was followed by a Preliminary Assessment submitted on February 1, 1984. Information collected during the PA indicated that more information was needed, which lead to a Site Investigation, which was submitted to U.S.EPA on September 1, 1984. An ESI was conducted and submitted to U.S.EPA on February 23, 1997. During the summer of 2003, the site was under scrutiny by the local media in response to a complaint by a citizen. The citizen claimed to have become sick due to swimming in the quarry ponds located at the US Steel Coking Facility. In response to these allegations, the Illinois EPA committed to an investigation of the property to determine the impact of contamination on human health and the environment.

The site can be accessed by three different routes. There is a bridge connecting the site to State Street. This gate is constructed at the bridge entrance on State Street. This gate has been open on past occasions. This bridge is in disrepair with plate steel covering holes in the structure, but it is apparent that vehicles use this route to enter the site. Another point of entry to the site is from Division Street located north of the site. Going west on Division Street, take a left on Daviess Avenue, then a quick left on to Old Canal Road. Old Canal Road parallels the I&M Canal, and eventually enters into the site. A gate is constructed at the Old Canal Road entrance. This gate has been vandalized in the past, but at this time is intact. The final entrance is by following the railroad tracks paralleling the site on the west side of the site. This entrance can be accessed by four-wheel drive vehicles, all terrain vehicles and by motorcycles. Illinois EPA posted signs at each of these potential entrances to the site stating that there may be a

potential health risk.

Sally !

Four brick coking ovens from the US Steel coking operations are located on the western middle portion of the site. Each of these structures is approximately 25 feet tall, 30 feet wide, and 100 feet long. A smoke stack is located to the north of the brick coking ovens. Four trailer homes are located in the southern/middle portion of the site. Two of these trailers are occupied at all times, while one other trailer is occasionally occupied and the fourth trailer is unused at this time. Two original buildings from US Steel are located on-site. These two buildings are utilized for storage and/or truck repair. A past investigation commented that coal tar waste was pooled in the basement of one of these buildings. The old coal pit is located in the extreme southern portion of the site. Currently, this structure is used to store equipment. The bottom and sides are concrete and is open to the elements. Numerous junked cars litter the site, along with a few truck trailers.

Currently, this site is utilized for the deposit of excavated material in the northwestern portion of the site. The quarries are located in the northeastern portion of the site. These quarries show evidence of use by rock climbers, fishermen, and site seers, all of whom are trespassers.

Local land use surrounding the site is comprised of residential homes to the north, the I&M Canal/Bike trail directly to the east, followed by some industrial/commercial and eventually residential properties. To the south of the site is the old US Steel works as well as the Joliet State Penitentiary, with industrial/commercial businesses. To the west of the property is the Chicago Sanitary and Ship Canal and Des Plaines River, followed by two industrial sites, and further west are residential homes.

Site topography reveals a relatively flat area with unpaved surfaces with areas of thick vegetation and exposed dirt surfaces. The northeast portion of the site consists of abandoned quarr es that are filled with water. The northwest portion of the site consists of piles of slag and rock outcreppings.

Three aquifers are beneath the US Steel Coking Facility site: the Quarternary drift, Silurian dolomite, and the Cambrian/Ordovician. The depth to groundwater at the site is about 15 feet. The Quarternary drift deposit ranges in thickness up to 110 feet and is composed of interbedded till units, lacustrine clay deposits, and water-bearing sand and gravel units. The Silurian dolomite bedrock formation varies in thickness from 110 to 500 feet. The Silurian dolomite and Quarternary drift aquifers are reported to be hydraulically interconnected by the Illinois State Water Survey. The Cambrian/Ordovician aquifer has depths of 500 feet or more and is not connected with the Silurian dolomite bedrock aquifer. These two layers are separated by the Ordovician Maquoketa Shale Group, which acts as an impermeable barrier to downward hydraulic migration (Illinois State Geological Survey, 1966).

An onsite private well is presumed to be about 90 feet deep. The onsite well reportedly supplies water to four onsite trailer homes. Analytical results from previous investigations have determined that at least two contaminants met observed release to the groundwater pathway criteria. About 442 private wells are screened in the shallow drift aquifer within 4 miles of the site. In addition, two school wells and three municipal wells are in the Joliet area within 4 miles of the site (Illinois State Water Survey (ISWS) 1993).

About 1,298 private wells are screened in the dolomite bedrock within four miles of the site. In addition, approximately 15 school wells, 10 small community/subdivision wells, and

Shirtell

between three to five municipal wells that supply Crest Hill, Illinois are within four miles of the site (ISWS 1994).

Mikes .

M. maid

It is difficult to determine the direction of the groundwater flow, due to the surface water bodies surrounding the site. According to the Soil Map of Will County, Illinois, Lockport Township (1993), the site is comprised of "made" land. Just north of the site the soil map indicates that there is an area of Joliet silty clay loam surrounded by Romeo silt loam. Because surface water bodies border the site on three sides, it is difficult to determine whether offsite private wells are likely to be affected by contaminated groundwater from the site. It should be noted that the direction of groundwater flow at the site is unknown.

The nearest residents reside onsite. Two persons live onsite in two of the trailer homes.

Two individuals temporarily use another trailer. The site is used as a recreation area for motorbikes and rock climbing. After the onsite residents, the closest residence is approximately "

'4 mile to the east. The population of Lockport is approximately 15,191

(http://lockportil.areaconnect.com/statistics.htm).

The site is in close proximity to several sensitive environments (U.S. Department of the Interior, 1973). These environments include the I&M Canal and the Des Plaines River. The Lockport Prairie, a state designated nature area is located within one mile of the site. The Material Services Prairie, the Markgraf Quarry Nature Area, and Pilcher Park are state designated nature areas within four miles of the site (Illinois Department of Conservation, 1993). One federally protected and two state protected wildlife species are within 4 miles of the site. No surface water intakes are located along the 15-mile downstream surface water segment from the site. The surface water bodies that border the site including the I&M Canal and the Chicago

Sanitary and Ship Canal are considered fisheries (Rockford Map Publishers, Inc., 1980).

2.2 SITE HISTORY

The US Steel Coking Facility site operated from the 1860s to around 1930. The site is currently utilized as a storage area for junk cars and excavation debris. Four trailer homes are located on site with two being occupied. Remnants of the coking facility are still present and include; scrap piles, rusted machinery, junked cars, a variety of drums and tanks, four coking ovens, and two buildings from past operations. Other areas of interest include the abandoned rock quarries located in the northeastern portion of the site.

The US Steel Coking Facility is located at 2215 South State Street in Lockport, Illinois (Fig. 2). The site is owned by two different entities, Village of Joliet Park District and a private corporation. A large railroad yard existed on the property during the operating years of US Steel, but is no longer present. The property was utilized from sometime in the 1860s as part of the US Steel steel plant. The coking facility is located approximately 1 mile north of the original US Steel manufacturing facility. The coking facility has four large coking ovens that produced coke that was used to charge the US Steel's blast furnaces during steel production. Slag material from the ovens is present at the site in the form of large solidified piles. Coal tar is present and can be seen oozing up at various intervals at the site and along the edge of the area that is utilized as a storage area for excavation material. Onsite wastes include the coal tar piles found on the northwestern portions of the site.

Industrial/commercial properties are located south, west and east of the facility.

Residential neighborhoods are located to the north of the site and to the east of South State

Street. The I&M bike trail is located on the eastern edge of the US Steel Coking Facility site.

This trail is heavily used for biking, walking and running. The I&M Canal separates the trail from the site.

2.3 PREVIOUS INVESTIGATIONS

The Illinois EPA investigated the site in 1973 in response to complaints that extensive open dumping of primarily general refuse was occurring. In 1973, Iris Development Company of Chicago owned the property. In 1974, T.P.G. Enterprises of Lockport, Illinois, purchased the property and proceeded to remove the general refuse. By 1976, site conditions had improved (Illinois EPA, 1984).

In 1980, the U.S.EPA investigated the site in response to a tip from the Cook County Metropolitan Sanitary District concerning abandoned drums. During the U.S.EPA inspection, about 100 drums were found; some were leaking a resinous, tarry substance. The U.S.EPA also found a 400-cubic-foot pile of coal tar, coal tar in an old tar tank, and coal tar and oil residue on top of sediment tanks in the old US Steel washing and cooling building. The U.S.EPA submitted an investigation report to the Illinois EPA in the autumn of 1980 (U.S.EPA, 1980).

After receipt of the U.S.EPA report, the Illinois EPA contacted the current site owner.

The owner informed the Illinois EPA that the drums had been taken to American Grading

Landfill in McCook County, Illinois. The Illinois EPA inspected the site on January 8, 1981, and found that some drums were still onsite.

In February 1984, the Illinois EPA conducted a Preliminary Assessment, which assigned a medium priority to the site (Ecology and Environment, 1985). This priority was assigned due to residual coal tar wastes from the coking operations were onsite and the possibility of chemicals deposited onsite by past dumping practices.

A U.S.EPA FIT contractor conducted a site inspection on July 31, 1984. This inspection revealed an open trailer containing drums that had leaked a rubbery, solidified material on the ground. The drums in the trailer are believed to be the drums that were previously reported as removed from the site. Also during the inspection, the previously mentioned coal tar pile was located and documented. Onsite observations suggested that some of the coal tar was migrating away from this pile. On July 16, 1985, a follow-up inspection, including sampling, was done. Four onsite soil and two well samples were collected. The four samples detected elevated concentrations of polyaromatic hydrocarbons, other volatile organic compounds, and inorganic compounds (Ecology and Environment, 1985). Photographs taken during the July 1984 site inspection documented the barrels in the open trailer, the solidified rubbery waste from the barrels on the outside of the trailer, a pile of coal tar at the northern section of the site, some liquid coal tar migrating from the main pile, and liquid tar that was bubbling up from underneath the new excavated fill material. In addition to the coal tar pile and liquid coal tar observed on the ground and bubbling up from the ground, coal tar waste was also reportedly observed in three shallow tarks in the basement of the old washing and cooling building.

An Expanded Site Inspection was conducted by the Alternative Remedial Contracting

Strategy (ARCS) contractor, which was authorized by the U.S.EPA on February 4, 1993. Illinois

EPA conducted the sampling activities for the ESI.

In response to an investigation by a local television station during the summer of 2003, the Illinois EPA committed to an additional ESI on the US Steel Coking Facility site. Additional information was needed to determine the impact of past operations at the site and current site conditions. During October 14-17, 2003, the Illinois EPA conducted sampling on the site. These

results revealed semi-volatiles at levels above the U.S.EPA Removal Action Levels. Sediment samples revealed a hazardous release of contaminants to Fraction Run. Soil sample results document contamination in various parts of the site. The concrete tank presents a hazardous condition by being open and possibly containing coal tar materials. Any person or animal could possibly fall into the open tank.

2.4 REGULATORY STATUS

Based upon available file information the US Steel Coking Facility does not appear to be subject to Resource Conservation and Recovery Act (RCRA) corrective action authorities.

Information currently available does not indicate that the site is under the authority of the Atomic Energy Act (AEA), Uranium Mine Tailings Action (UMTRCA), or the Federal Insecticide

Fungicide or Redenticide Act (FIFRA).

3.0 EXPANDED SITE INSPECTION ACTIVITIES

3.1 SAMPLING ACTIVITIES

N tong

Sampling activities were conducted at the US Steel Coking Facility site during the week of October 14-17, 2003. Soil, sediment, waste and surface water samples were collected to evaluate the potential of contamination from past facility operations. Key samples can be found in Tables 2-15. Sample locations are depicted in Figures 3-6.

3.1.1 Soil Sampling

Twenty-two soil samples were collected during the ESI during the week of October 14, 2003. Soil samples were collected with direct push technology utilizing the Geoprobe. Where the terrain limited Geoprobe use, a hand auger and trowel was used to collect soil samples. Soil

samples were collected from depths of 6 inches to 23 feet below ground surface (bgs). Individual sample descriptions and depths are included in Table 1, Sample Descriptions. X103 was selected for a background sample due to the area of collection of the sample. This sample was collected in an area that did not appear to be impacted by past activities. This sample was used to compare against the other samples collected from the site to determine if an observed release had occurred. Soil samples were collected in accordance to the restrictions observed in the Illinois EPA Quality Assurance Project Plan (QAPP).

Sample analysis revealed observed release criteria for inorganics, volatiles, and semi-volatiles. The levels that are significantly increased above background concentrations will be highlighted in Tables 2-15.

Waste samples were collected from the coal tar seeps found mostly on the northwestern portion of the investigative area. These samples revealed semi-volatile contamination above the U.S.EPA Removal Action Levels (Table 8). At this time, the site is being referred to U.S.EPA for a Time Critical Removal. The analytical results of the waste samples (Tables 5-7) were not utilized in determining the site score for this ESI.

Twelve samples were collected for Toxicity Characteristic Leaching Procedure (TCLP) analysis for metals and semi-volatiles. This analysis did not reveal any contamination above benchmarks published in Section 721.124 of Title 35: Environmental Protection, Chapter I: Pollution Control Board, Part 721 Identification and Listing of Hazardous Waste, Subpart C: Characteristics of Hazardous Waste, Section 721.124 Toxicity Characteristic. These results can be found in Table 15.

A114.10

3.1.2 Sediment Sampling

Mary 1

Seventeen sediment samples were collected from the areas of investigation during the ESI. Sediment samples were collected from the I&M Canal, Fraction Run, the rock quarry ponds and from the concrete tank. X201 through X204 were collected from the quarry ponds located in the northeastern portion of the site. X205 was collected from the sediments of the concrete tank. X206 was collected from the stained outflow of the concrete tank. X207 through X212 was collected from Fraction Run located north of the site. X213 through X217 was collected from the I&M Canal. Analysis of the sediment samples collected from the quarry ponds revealed semi-volatile contamination for X204. X204 was compared to sediment sample X202. X202 was used as the background due to the lack of contamination found in the sediments of this quarry pond. Sediment sample results are located in Tables 9-11.

The sediment sample collected from the concrete tank (X205) and the sample collected in the drainage pathway (X206) were compared to X103. Highlight 9-1 in the Hazard Ranking System Guidance Manual states that tanks filled with contaminated soil should be compared to soil at the site. It is assumed that many of the sediments found in the concrete tank were deposited there by runoff from the nearby area. This was apparent during the inspection due to the observation of the tank prior to and after a rain shower. Before the rain shower, the tank appeared dark with an oily sheen, but after the rainfall the tank contents were a brownish color matching the surrounding soil. X206 was also compared to X103 due to the area sampled is usually dry except during periods that liquids are being discharged from the concrete tank. X205 and X206 revealed elevated levels of semi-volatiles.

Samples collected from Fraction Run (X207 through X212) reveal the presence of semi-

volatiles in samples X207, X208, and X209. X209 is a ditch that runs along the railroad tracks south to Fraction Run. X207 and X208 are near the coal tar seep area. During the ESI, the vegetation lining Fraction Run was flattened due to a heavy rain earlier in the week. This observation made it clear that the water from the creek had overflowed the creek and had come into contac: with the coal tar seeps located on the northern edge of the site. To further this observation, a pool of water was present at the base of the north hill that was discolored as a dirty brown/black and smelling of coal tar. Sample analysis of X207 and X208 reinforce the assumption that the coal tar has been entering into Fraction Run and subsequently entering the Des Plaines River.

Sample analysis of the sediment samples collected from the I&M Canal reveal contamination in X215 and X217. X217 was collected upstream of the property and was to be used as a background. Due to the presence of semi-volatile contamination discovered upstream from the site, it could be assumed that the contamination found in the I&M Canal is not related to the US Steel Coking Facility. During the ESI, there was no observation of drainage from the site to the I&M Canal. It is unknown if groundwater from the site is entering and impacting the I&M Canal.

3.1.3 Surface Water Sampling

Five surface water samples were collected during the ESI. Surface water samples were collected to determine the health risk that may be associated with human targets swimming in the quarry ponds. Sample analysis revealed that S201 and S201-D did not correlate as being duplicate samples. S201 had significantly higher inorganic contamination that did S201-D. This may signify that sediments may have been stirred up and inadvertently collected in the surface

water sample. S201 exceeded Superfund Chemical Data Matrix (SCDM) values by three times for cadmium, iron, lead and zinc. S204 was collected from the surface water from the depression area in the north section of the investigative property. S204 revealed iron exceeded the SCDM value by three times. Inorganic results are located in Table 14. The sample collected from the concrete tank (S205) revealed bis(2-ethylhexyl)phthalate above background concentrations from all of the rock quarries (Table 13). The surface water samples were not used in scoring the site.

3.1.4 Groundwater Sampling

Groundwater sampling was not conducted during the ESI. The Illinois Department of

Maller

Public Health conducted drinking water sampling of the onsite well and wells located north of the site. Letters were distributed with the analytical results from these well sampling activities and recommendations from the Illinois Department of Public Health about water usage. Four wells were sampled in the small subdivision located just north of the US Steel Coking Facility. Two wells that were sampled had concentrations of 2,5 cyclohexadine-1,4 dione (para-quinone). This contaminant was found below concentrations considered hazardous for human consumption. This contaminant is used as a fungicide and for the manufacture of dyes and chemicals. This contaminant is also used in photography developing procedures. Hexadonic acid was found in one well, below hazardous health conditions. Hexadonic acid is a component of vegetable oil. In another well, 4 phenyl-4-piperidine carboxylic acid methyl ester was discovered. Another name for this is Morpheridine, which is a synthetic opiate. Due to no health information on the contaminant there was a recommendation that bottled drinking water be utilized. The last well had a detection of 2,4 dichlorophenoxy acetic acid (2,4-D) which is used as an agriculture product. This contaminant was found at 76.4 ug/L which is above the MCL (70

ug/L). Illinois Department of Public Health recommended that bottled water be utilized.

These contaminants that were found do not correspond to the activities that occurred at the US Steel Coking Facility. It is unclear at this time as to the origin of these contaminants.

3.2 ANALYTICAL RESULTS

Analytical results are contained in Volume 1, 2 and 3 of this report. Sample tables are included in the Tables and Figures section of this report. The analytical results revealed semi-volatile contamination throughout most of the site.

4.0 SITE SOURCES

This section includes descriptions of the various hazardous waste sources that have been identified at the US Steel Coking Facility. The Hazard Ranking System defines a "source" as: "any area where a hazardous substance has been stored, disposed or placed, plus those soils that have become contaminated from migration of hazardous substance." This does not include surface water or sediments below surface water that has become contaminated.

Information obtained during the ESI identified three separate areas of coal tar seeps as sources of contamination at the US Steel Coking Facility. Soil samples also indicate that the soil is contaminated. It is unknown as to the amount of contaminated soil, but the area is greater than one square foot. The concrete tank is considered a source due to the sediments and liquids present in the tank. As additional information becomes available, the possibility exists that additional sources of contamination may exist.

4.1 SPECIFIC SOURCES

There are multiple sources at the US Steel Coking Facility. There are two coal tar seeps that are near the northwestern corner of the site. These two sources are in close proximity and may be connected but until this is verified, these piles will be considered two separate sources.

Another source would be an additional coal tar seep located near the middle of the site. These coal tar seeps were sampled and analyzed. It should be noted that there are other coal tar seeps in the northern portion of the site that were not sampled.

Coal tar is primarily used for the production of refined chemicals and coal tar products such as creosote, coal tar pitch, and crude naphthalene and anthracene oils from the distillation of crude coal ar. It is also used as a fuel in open-hearth furnaces and blast furnaces in the steel industry. Coal tars are by-products of the destructive distillation (carbonization) of coal to produce coke and/or gas. The composition and properties of a coal tar depend mainly on the temperature of the carbonization and, to a lesser extent, on the nature (source) of the coal used as feedstock. Coal tars are usually viscous liquids or semi-solids that are black or almost black in color. Coal tars have a characteristic naphthalene-like odor. Coal tars are slightly soluble in water. In general, coal tars are complex combinations of hydrocarbons, phenols, heterocyclic oxygen, sulfur, and nitrogen compounds. Over 400 compounds have been identified in coal tars and as many as 10,000 may actually be present. The content of polycyclic aromatic hydrocarbons in coal tars increases as the carbonization temperature increases. Low-temperature coal tars (< 700 °C) are black, viscous liquids that are denser than water. Low-temperature coal tars are less aromatic than high-temperature coal tars (> 700 °C) containing only 40 to 50% aromatic hydrocarbons (www.atsdr.cdc.gov/toxprofiles/tp85-c2.pdf).

X301, X302 and X303 were collected from the coal tar seeps near the northwestern portion of the site. X304 was collected from a coal tar seep near the middle of the site. These samples reveal contamination above the U.S.EPA RALs. These samples were collected in the 1 to 6 inch range. The size of these sources is estimated at a total of 15 square feet for three sources. It should be noted that several other areas of coal tar seeps were observed but not sampled.

Another source of contamination is the contaminated soil. The amount of contaminated soil is determined to be greater that one square foot. Sample analysis revealed semi-volatiles across the site, but with some samples in-between that did not meet contamination criteria. The semi-volitales can be attributable to the activities that occurred on the site during the US Steel Coking Facility operating period. Eleven of the 22 soil samples collected met observed release criteria.

The concrete tank is also considered a source. During the ESI, a chemical sheen could be seen on the water surface. It is unknown at this time the entire contents of the tank, but it is possible that coal tar could be present in the bottom of the tank. Sediment sampling revealed semi-volatile contamination exceeding observed release criteria. The semi-volatile contamination discovered are attributable to previous activities that occurred during the occupation of the site by US Steel. This tank is a hazard in that it is open to the area with no safety measures. The possibility of humans and animals falling into the tank exists. The depth of the tank is approximately eight feet; this poses a significant drowning hazard. The concrete tank has an estimated volume of 2,400 cubic feet. At the time of this inspection, the tank was completely full of liquids. These liquids were draining from the tank from the fractured concrete

lip on the northeast corner of the tank. The runoff area from the tank also revealed semi-volatile contamination.

4.2 OTHER SOURCES NOT INVESTIGATED

Areas of coal tar were observed at the site, but not all areas were sampled to confirm contamination. Most of the coal tar seeps appeared near the northern portion of the site. This statement does not suggest that other areas of coal tar are not present in other areas of the property.

5.0 MIGRATION PATHWAYS

The Office of Site Evaluation identifies three migration pathways and one exposure pathway, as identified in CERCLA's Hazard Ranking System, by which hazardous substances may pose a threat to human health and/or the environment. Consequently, sites are evaluated on their known or potential impact to these pathways. The pathways evaluated are groundwater migration, surface water migration, soil exposure and air migration.

This section presents the activities conducted during the ESI to complete the soil sampling, surface water sampling, and sediment sampling. Procedures used for sample collection, equipment decontamination, quality assurance, and sample handling are described below.

Illinois EPA conducted site activities on 14-17 of October 2003. Illinois EPA personnel met to conduct a general reconnaissance of the site to identify proposed sampling locations.

Currently, the site is active and used as a place to store excavation material and as a junkyard.

The site consists of two buildings and four trailers with two being occupied at all times. A chain-link gate restricts vehicular access to the site from Canal Street and State Street. The site is

situated with the Des Plaines River on the west of the site and the I&M Canal on the east side of the site.

5.1 Groundwater Pathway

Miller P

Hade

Groundwater samples were not collected during the ESI. Groundwater samples were attempted, but groundwater was not encountered during the investigation. Although no groundwater samples were collected during the ESI, the Illinois Department of Public Health did collect drinking water from wells located to the north of the site. These results revealed four contaminants, but only one contaminant (2,4-D) was above the MCL. It is possible that another contaminant (2,5 cyclohexadine-1,4 dione (para-quinone)), could be a derivative of coal tar production. It should be stated that groundwater flow in the area is unknown at this time. From past investigations, it was discovered that groundwater flow would be almost impossible to predict due to the influence of neighboring water bodies on the property and with the quarries located onsite.

5.2 Surface Water Pathway

Five surface water samples were collected during the ESI. Surface water samples were collected to determine the health risk that may be associated with human targets swimming in the quarry ponds. Sample analysis revealed that S201 and S201-D did not correlate in being duplicate samples. S201 had significantly higher inorganic contamination that did S201-D. This may signify that sediments may have been stirred up and inadvertently collected in the surface water sample. S201 exceeded SCDM values by three times for cadmium, iron, lead and zinc. S204 was collected from the surface water from the depression area in the north section of the investigative property. S204 revealed iron exceeded the SCDM value by three times. S205

which was collected from the concrete tank revealed bis(2-ethylhexyl)phthalate above background concentrations from all of the rock quarries. The surface water samples were not used in scoring the site.

Seventeen sediment samples were collected from the areas of investigation during the ESI. Sediment samples were collected from the I&M Canal, Fraction Run, the rock quarry ponds and from the concrete tank. X201 through X204 were collected from the quarry ponds located in the northeastern portion of the site. X205 was collected from the sediments of the concrete tank. X206 was collected from the stained outflow of the concrete tank. X207 through X212 was collected from Fraction Run located north of the site. X213 through X217 was collected from the I&M Canal. Analysis of the sediment samples collected from the quarry ponds revealed semi-volatile contamination for X204. X204 was compared to sediment sample X202. X202 was used as the background due to the lack of contamination found in the sediment sample of this quarry pond.

The sediment sample collected from the concrete tank (X205) and the sample collected in the drainage pathway (X206) was compared to X103. Highlight 9-1 in the Hazard Ranking System Guidance Manual states that tanks filled with contaminated soil should be compared to soil at the site. It is assumed that many of the sediments found in the concrete tank were deposited there by runoff from the nearby area. This was apparent during the inspection due to the observation of the tank prior to and after a rain. Before the rain the tank appeared dark with an oily sheen, but after the rainfall the tank contents were a brownish color matching the surrounding soil. X206 was also compared to X103 due to the area sampled is usually dry except during periods that liquids are being discharged from the concrete tank. X205 and X206 revealed

elevated levels of semi-volatiles.

Samples collected from Fraction Run (X207 through X212) revealed the presence of semi-volatiles in samples X207, X208, and X209. X209 is a tributary of Fraction Run. X209 is a ditch that runs along the railroad tracks south to Fraction Run. X207 and X208 were located near the coal tar seep area. During the ESI, the vegetation lining Fraction Run was flattened due to a heavy rain earlier in the week. This observation made it possible to assume that the water from Fraction Run was in contact with the coal tar seeps located on the northern edge of the site. To expand on this observation, a pool of water was present at the base of the north hill that was discolored as a dirty brown/black and smelling of coal tar. Sample analysis of X207 and X208 reinforce the assumption that the coal tar was entering into Fraction Run and subsequently entering the Des Plaines River. The overland flow segment is the portion of the hazardous substance migration path from a source to a surface water body. The overland flow segment from the two coal tar seeps located in the northwest corner of the site to the collection points of the sediment samples in Fraction Run is approximately 112 feet and 75 feet.

Sample analysis of the sediment samples collected from the I&M Canal reveal contamination in X215 and X217. X217 was collected upstream of the property and was to be used as a background. Due to the presence of semi-volatile contamination upstream from the site, it can be assumed that the contamination found in the I&M Canal may not be related to the US Steel Coking Facility. During the ESI there was no observation of drainage from the site to the I&M Canal. Sample analysis of X215 and X217 revealed contaminants that correlate to the contaminants found in the waste and soil samples from the site.

5.3 Soil Exposure

Marie 1

This section outlines the procedures used and observations made during the ESI conducted at the US Steel Coking Facility site. Figure 3 Shows onsite soil sample locations.

Table 1 provides a summary of sample descriptions and locations.

There were 22 soil samples collected. The soil samples were collected throughout the site at depths of 6 inches to 23 feet below ground surface. The majority of the topsoil at the US Steel Coking Facility is black cinders in the southern portion, while the northern section of the site is mostly covered with gray slag material. The soil samples were analyzed for Resource Conservation Recovery Act (RCRA) metals, polychlorinated biphenyls (PCBs), pH, semi-volatile organic compounds (SVOCs), and volatile organic compounds (VOCs).

5.4 Sample Handling

Sample identification, documentation, and chain-of-custody were conducted in accordance with applicable Contract Laboratory Program (CLP) sample handling protocol. The proper chain-of-custody was maintained during collection, storage, and transportation of the samples. The samples were packaged and hand delivered to the United Parcel Service for transportation to the appropriate laboratories. All samples were collected in accordance to the restrictions observed in the QAPP. The soil samples were placed into appropriate laboratory containers, labels were completed and affixed, the containers were placed on ice, and a chain-of-custody form was completed. Sets of clean, dedicated equipment were used at each sample location. Sterile gloves were donned before the first sample was collected and changed between each additional sample.

6.0 ANALYTICAL RESULTS

During the investigation, soil, sediment, and surface water samples were collected. The analytical samples were delivered to UPS. These samples were then sent to the appropriate laboratory. Organic soils, waste, sediments and surface waters were shipped to A4 Scientific of The Woodlands, Texas. Inorganic soils, waste, sediments and surface water samples were shipped to Bonner Analytical of Hattiesburg, Mississippi. TCLP analysis of soils was shipped to Region 5 Central Regional Laboratory in Chicago, Illinois. Analytical results are presented in Volume 1 and 2.

Waste sample results that exceeded the Emergency Removal Action Levels are highlighted in the Table 8. The 22 soil samples were analyzed for RCRA total metals, VOCs, SVOCs, PCBs, and pH.

6.1 Groundwater Sampling

Alla,

No groundwater samples were collected during the ESI. Groundwater samples were attempted, but groundwater was no encountered during the investigation.

6.2 Surface Water Samplings

Five surface water samples were collected during the Expanded Site Inspection. These surface water samples were collected to determine if contaminants were affecting human swimmers in the rock quarries. Analysis of the four surface water samples from the rock quarries revealed contaminants in one sample (S201) that exceeded the SCDM value by three times for cadmium, iron, lead, and zinc. These results are in question because the duplicate sample that was collected at the same depth did not reveal the same levels of inorganics.

One sample (S205) was collected from the concrete tank revealed elevated level of bis(2-

ethylhexly)phthalate above background concentrations. Bis(2-ethylhexyl) phthalate was found to be three times the results from all four rock quarry samples.

It should be noted that the surface water samples were not used to determine the site score in the PreScore program.

6.3 Soil Sampling

Heise

There were twenty-two soil samples collected from the US Steel Coking Facility site. The soil samples were collected throughout the site at depths from 6 inches to 23 feet below ground surface. The majority of the soil samples were collected at a depth of one foot. X103 was used as the background concentrations found across the site. X103 was located in the northeast corner of the site in a wooded area that appeared to be undisturbed by site activities. In comparison with X103, it was found that the inorganics that exceeded the background sample by three times included arsenic, beryllium, cadmium, chromium, cobalt, copper, iron, lead, mercury, nickel, silver, vanadium, zinc and cyanide. Semi-volatile analysis revealed 1-1'biphenyl, 2methylnapthalene, acenaphthene, acenaphthylene, acetophenone, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)-anthracene, dibenzofuran, fluoranthene, fluorine, indeno(1,2,3-cd)-pyrene, naphthalene, phenanthrene, phenol, and pyrene at three times the levels of the background sample. Volatile analysis revealed 1,2-dichloroethane, acetone, benzene, ethylbenzene, isopropylbenzene, methyl acetate, methylene chloride, toluene, and xylenes at three times the levels of the background sample. Pesticide analysis did not reveal any observed contamination by chemical analysis. The samples that exceeded the background levels by three times are highlighted in Tables 2-4.

There were seventeen sediment samples collected during the ESI. These sediment samples were collected from the I&M Canal, Fraction Run, quarry ponds, depression area and the concrete tank. Sediment samples collected from the I&M Canal revealed elevated levels of semi-volatiles in X217 and X215. X217 was to be the background sample, due to being upstream from the site. Since X217 was contaminated it is possible that sediments were contaminated by a source located upstream. Reconnaissance from the ESI did not reveal surface water runoff from the site to the I&M Canal. It should be noted that groundwater could possibly be entering the I&M Canal, but this assumption cannot be corroborated at this time. Tables 9-11 contain the sediment sample results.

Whitely

Three of the seven samples collected from Fraction Run revealed semi-volatile contamination. X212 was collected as the background sample, as it was located upgradient from all other samples in Fraction Run. X211 and X210 did not reveal semi-volatile contamination. X209 was collected from a tributary of Fraction Run. This tributary is located running parallel on the western side of the railroad tracks and empties into Fraction Run. This sediment sample revealed elevated levels of semi-volatiles, but at 10 times less than the concentrations found in samples X207 and X208, with the exception of bis(2-ethylhexly)phthalate. X208 was collected just prior to Fraction Run passing under the railroad bridge. This location is approximately 112 ft and 75 ft from the two coal tar seeps. Elevated levels of semi-volatiles were detected in X208, which can be attributable to the contaminants found in the coal tar seeps (waste samples). X207 was collected approximately 170 feet downstream from X208, but upgradient from the tributary from which X209 was collected. X207 revealed elevated levels of semi-volatiles, which can be attributable to the coal tar seeps. Fraction Run flows approximately 650 feet until it meets the

main water body of the Des Plaines River. The Des Plaines River is a designated fishery. There are no designated surface water intakes in the 15-mile target distance limit.

The sediment samples collected from the quarry ponds revealed only one sample (X203, which was collected from the southern most quarry pond) which had an elevated level of isophorone.

X204 was collected from the depression area located in the northern portion of the site.

This sample is to be considered a soil sample due to the depression does not meet the HRS criteria to be a perennial stream nor does it met the criteria to be scored as an intermittent stream.

Analysis revealed elevated levels of semi-volatiles that correspond to the past activities that occurred at the site.

X205 was collected from the sediments found deposited in the concrete tank. It was determined that the sediments in the concrete tank be compared to the soil background due to the observations made during the ESI. This decision is also in correlation with the HRS criteria located in the Hazard Ranking System Guidance Manual, page 344. The sediment collected from the tank revealed semi-volatiles that met observed release criteria. The contaminants found in the sediments of the tank correspond to the contaminants found in other portions of the site.

X206 was determined to be a soil sample also, due to the sample not meeting the criteria for a sediment sample. X206 was collected from the stained drainage way leading away from the concrete tank. This sample revealed contamination from the tank to the ditch. From observing the topography of the site, during a heavy discharge from the tank, contaminated liquids would flow north into the ditch, then to the coal tar seep areas, and then flow into Fraction Run.

A Federally Endangered Plant species is located within one mile of the site. This plant, the Leafy Prairie Clover is located in the prairie portion of Dellwood West Park (part of the site is located in Dellwood West Park). It should be noted that there are also two rare species growing in the prairie (located north of the site): Lakeside Daisy and Quillwort.

6.4 Air Route

Air samples were not collected during the ESI. It should be noted that the site is not entirely covered with vegetation and the potential to release particulates into the air is possible.

A strong naphthalene smell is present, especially in the northern portion of the site.

7.0 REFERENCES

- 1 Corlands Connection, New Park and Restored Prairie Take Shape in Lockport. Corlands Connection, Spring 2003.
- ARCS Contractor Project 71280.121, Expanded Site Inspection, Bill's Excavating. August 9, 1996.
- New Jersey Department of Health and Senior Services, Hazardous Substance Fact Sheet, p-benzoquinone, February 1996.
- 4. Canadian Centre for Occupational Health and Safety. Cheminfo, Palmitic Acid. 2004. www.intox.org/databank/documents/chemical/palmitic/cie542.htm
- 5. Master Document for Reregistration of 2,4-Dichlorophenoxyacetic Acid Uses. 2,4-D Industry and IR-4. July 28, 2003.
- 6. Illinois Environmental Protection Agency. Bureau of Land Files, US Steel Coking Facility, ILD 980 704 845.
- 7. United States Environmental Protection Agency. Hazard Ranking System Guidance Manual. EPA 540-R-92-026. November 1992.
- 8. Hazard Ranking System Hazardous Substance Benchmarks. SCDM Data Version 1/27/2004.

Time?

Marie IV

- 9. Ecology and Environment. Inspection Report for Bill's Excavating. Lockport, Illinois. December 5, 1985.
- 10. U.S.EPA. Potential Hazardous Waste Site Identification and Preliminary Assessment Form (EPA Form T 2070-2). August 4, 1980.
- 11. Illinois EPA. Potential Hazardous Waste Site Preliminary Assessment Form (EPA Form 2070-12). February 28, 1984.

Figures and Tables

	Tal	ble 1	1	
Samp	le D	esc	ripti	ons

Table 1 Sample Descriptions			
Sample	Depth		Location
X101	9 ft.	Black clay material	mid-site, south of quarries
			Northeast corner of site, near the
			parking area between the two quarry
X102	2 ft	Brown loam	ponds
			Collected from a wooded area to the
X103	2 ft	brown loam with organic material	east of the rock quarries
			Collected from the northern portion of
			the site, east of the middle road
X104	1 ft	brown loam	bisecting the site from north to south
		black cindery material intermixed with	collected at the eastern base of the sla
X105	1 ft	clay	cliffs
		black cindery material intermixed with	collected at the eastern base of the sla
X106 (Duplicate)	1 ft	clay	cliffs
			collected from the southern portion of
			the lowlying area in the northern portio
X10 7	1 ft	dark brown/black loam	of the site
X108	6 ft	black silty clay with high plasticity	Slightly northwest of the crusher building
			Collected southeast of the crusher in a
			low lying area with areas standing water
X109	1 ft	loam with gray slag	and cattails and slag
			Collected north of X109 in an area of
		small rocks and slag with some organic	slag and limestone, unable to penetrate
X110	1 ft	material	more than 1 foot.
			Northern portion of the site east of the
		Dark black material with some	car storage area and original buildings
X111	12 ft	gray/green clay	in an area of grass
			Collected directly south of the north
X112	1 ft	black cinder material	original building
			Collected between the trailers near the
X113	1 ft	dark brown loam	foundation of an old building
			Collected from the northwestern portion
		brown clay with black cinders with some	, ·
X114	6 inches	sand	material.
			Collected from the northwestern portion
			of the site from atop of the excavated
X115	23 ft	black silty material	material, south of X114
			Collected from the northwestern portion
X116	2 ft	black cindery material	of the site, next to road
			Collected from east of the impoundmen
		light brown crumbly clay with black	in an area used for 4-wheelers and dirt
X117	2 ft	cinders	bikes
			Collected west of the coke ovens in
X118	12 ft	coarse gray slag with brown silty clay	paint ball playing field
			West of the coke ovens, south of paint
X119	16 ft	Black smelly clay	ball area
			south end of site, just north of the foot
X120	3 ft	gray green slag with black clay	bridge

Table 1 Sample Descriptions					
Sample	Depth	Appearance	Location		
X121	4 ft	black and reddish cinders with a petroleum smell	Collected from east of the priop coal pit Collected east of the smokestack, mid-		
X122	1 ft	cindery slag material	site		
T101	8 ft	sand, gravel with a small amount of clay (sediment) Very strong odor.	Collected from the sediments of the concrete lined pit.		
T102	1 ft	black cindery material with clay	Collected near the eastern base of the slag cliffs		
⁻ 103	2 inches	dark brown/black clayey silt, with black spots of stained soil (coal tar)	Collected from the sediments in the depression area		
⁻ 104	1 inch	coal tar, strong coal odor, sample has a yellowish tint when warmed	Collected from the coal tar seep at the northwest corner of site		
T105	1 inch	black cindery material with coal tar odor	collected from coal tar seep along the western boundry		
⊤106	1 ft	organic loam with gray slag	Southeast of crusher in a low lying area with slag, standing water and cattails		
T107	1 inch	black cinders	Collected just north of the southern mos original building		
T108	2 ft	black cindery material	Collected near the northwestern portion of site, north of the dirt bike/4-wheeler area		
T109	2 ft	cinders with slag	South end of site, just north of the foot bridge		
T110	2 ft	cinders with slag	South end of site, just north of the foot bridge		
T111	1 ft	cindery slag material	east of the smokestack near middle of site		
T112	6 inches	Large coal tar seep	Collected from the grassy area containing asphalt in the northern middle portion of site		
X301	2 inches	coal tar seep	Collected from the road on the north portion on the site		
X30 2	1 inch	coal tar, strong coal odor, sample has a yellowish tint when warmed	Collected from the coal tar seep at the northwest corner of site		
X303	1 inch	black cindery material with coal tar odor	collected from coal tar seep along the western boundry		
X304	6 inches	Large coal tar seep	Collected from the grassy area containing asphalt in the northern middle portion of site		
X2:01	4 inches	black fine mucky sediment, mostly silt	Collected from the NE quarry		
X2:01-D	4 inches	black fine mucky sediment, mostly silt	Collected from the NE quarry		

Table 1					
Sample Descriptions Sample Depth Appearance Location					
Sample	Debtil	Appearance	Esoution		
ł			Callanda different de a calidalla accesso a card		
\(c.00		silty dark brown with a small amount of	Collected from the middle quarry pond		
X2:02	3 inches		directly east of the depression area		
X2:03	3 inches	dark brown/black silt with clay	Southern most quarry pond		
V6:04		dark brown/black clayey silt, black spots			
X2:04	2 inches		Collected from the depression area		
		sand and gravel with a small amount of	Callage and from the company to the ad		
V005	0:	clay with leaves and organic material,	Collected from the concrete lined		
X2:05	3 inches	very strong odor	pit/impoundment		
			Collected on the north side of the		
		l .	concrete pit/impoundment along		
X2:06	2.5 inche	dandy fine slag a dark brown color	drainage route		
			Collected from the sediment from		
			Fraction Creek which flows into the Ship		
X2:07	2 inches	Brown silty clay	Canal		
ł	1		Collected from Fraction Creek, east of		
			RR bridge from along the side of the		
X2:08	2 inches		creek due to lack of sediments.		
		brown/black fine silt with organic	Collected from Fraction Creek,		
X2:09	2 inches	material	upgradient of X207		
			Collected approximately 75 yards		
X2:10	2 inches	very fine sediments/silts	upgradient of the RR bridge		
}	J	brown gravel and silt mixed with large	Collected from Fraction Creek,		
X2:11	2 inches	rocks, with a slight amount of sand	upgradient of X210		
			Collected from Fraction Creek		
X212	2 inches	sand and gravel with fine silts	upgradient of X211		
			Collected from Fraction Creek		
X2:12-D	2 inches	sand and gravel with fine silts	upgradient of X211		
			Collected from I&M Canal, just south of		
			the foot bridge at the southern end of		
X2:13	3 inches	rocks mixed with fine brown silts	the property		
		Mix of sand and silt with gravel, dark			
		brown in color with a small amount of	Collected from the I&M Canal, near the		
X2:14	6 inches		steel bridge that enters trailer park		
		Dark brown clayey silt with some sand			
		and gravel. Numerous rocks on bottom	Collected upgradient from sample X214		
X2:15	6 inches	of canal	in the I&M Canal		
		silty sand with small amount of gravel,	Collected from the I&M Canal,		
X2:16	1 ft	dark brown in color	upgradient of X215		
		dark brown sandy silt with gravel with a	Collected upgradient from sample X215		
X217	6 inches	slight organic odor	and just south of an old set of locks		
S201	3 ft	clear water	Collected from the NE quarry		
S2:01-D	3 ft	clear water	Collected from the NE quarry		
<u></u>					
			Collected from the middle quarry pond		
S202	surface	clear water	directly east of the depression area		

A Hasili

Table 1 Sample Descriptions			
Sample Depth Appearance Location			
S203	surface	fairly clear water with strong organic odor	Southern most quarry pond
S204	2-6 inche		Collected from the depression area in the northern portion of the site
S205		surface water has a sheen and a strong petroleum odor	Collected from the concrete lined pit/impoundment

Table 2
Volatile Analysis of Soil Samples

V	E0018		E0008		E0015		E0021		E0022		E0022DL		E0023	
Sampling Location :	X103		X101		X102	14	X104		X105	1.1	X105		X106	
Matrix:	Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units:	ug/Kg	F4.	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :					32.0								100	
Time Sampled :	100		1		1		100	3. 1	Barrell St	31			92.5	
%Moisture :	18		11		20		50	1	36		36		34	
pH:					torus e	. 34				-	Dental in			
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0	100
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
DICHLORODIFLUOROMETHANE	12	U	10	U	12	U	33	U	2000	UJ	51000	UJ	2000	UJ
1,1,1-TRICHLOROETHANE	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	U
1,1,2,2-TETRACHLOROETHANE	12	UJ	10	U	12	U	33	UJ	2000	U	51000	U	2000	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHAN		U	10	U	12	U	33	U	2000	U	51000	U	2000	U
1,1,2-TRICHLOROETHANE	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	U
1,1-DICHLOROETHANE	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	U
1,1-DICHLOROETHENE	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	UJ
1,2,4-TRICHLOROBENZENE	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	U
1,2-DIBROMO-3-CHLOROPROPANE	12	UJ	10	U	12	U	33	UJ	2000	U	51000	U	2000	U
1,2-DIBROMOETHANE	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	U
1,2-DICHLOROBENZENE	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	U
1,2-DICHLOROETHANE	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	U
1,2-DICHLOROPROPANE	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	U
1,3-DICHLOROBENZENE	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	U
1,4-DICHLOROBENZENE	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	U
2-BUTANONE	12	UJ	7	J	12	U	33	UJ	2000	U	51000	U	2000	U
2-HEXANONE	12	UJ	10	UJ	12	UJ	33	UJ	2000	U	51000	U	2000	U
4-METHYL-2-PENTANONE	12	UJ	10	UJ	12	UJ	33	UJ	2000	U	51000	U	2000	U
ACETONE	12	UJ	31		12	U	33	UJ	8000		51000	U	2200	J
BENZENE	12	U	10	U	12	U	33	U	140000		630000	1/5	240000	J
BROMODICHLOROMETHANE	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	U
BROMOFORM	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	U
BROMOMETHANE	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	U
CARBON DISULFIDE	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	U
CARBON TETRACHLORIDE	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	U
CHLOROBENZENE	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	UJ
CHLOROETHANE	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	U
CHLOROFORM	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	U
CHLOROMETHANE	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	U
CIS-1,2-DICHLOROETHENE	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	U
CIS-1,3-DICHLOROPROPENE	12	U	10	U	12	U	33	U	2000	U	51000		2000	U
CYCLOHEXANE	12	UJ	10	U	12	U	33	UJ	2000	U	51000		2000	_
DIBROMOCHLOROMETHANE	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	U
ETHYLBENZENE	12	U	10	U	12	U	33	U	5100		12000	J	3700	
ISOPROPYLBENZENE	12	U	10	U	12	U	33	U	1100	7	2800	J	810	100000
METHYL ACETATE	12	UJ	10	U	12	U	33	UJ	3600		51000		820	-
METHYL TERT-BUTYL ETHER	12	U	10	U	12	U	33	U	2000	U	51000		2000	-
METHYLCYCLOHEXANE	12	U	10	U	12	U	33	U	2000	U	51000	U	1300	
METHYLENE CHLORIDE	6	J	16	UJ	20	UJ	20	J	1400	J	2900	J	2000	
STYRENE TETRACHLOROETHENE	12	U	10	U	12	U	33	U	2000	U	15 (5, 15, 15, 15)	U	2000	U
	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	U
TOLUENE TRANS 1.2 DICHI OPOETHENE	12	U	10	U	12	U	33	U	130000	-	350000	-	120000	J
TRANS-1,2-DICHLOROETHENE	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	U
TRANS-1,3-DICHLOROPROPENE	12	U	10	U	12	U	33	U	2000	U		U	2000	U
TRICHLOROETHENE	12	U	3	J	12	U	33	U	2000	U		U	2000	UJ
TRICHLOROFLUOROMETHANE	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	U
VINYL CHLORIDE	12	U	10	U	12	U	33	U	2000	U	51000	U	2000	U
XYLENES (TOTAL)	12	U	10	U	12	U	33	U	65000		140000		49000	Hill

Table 2
Volatile Analysis of Soil Samples

V	E0018		E0023DL	1	E0024		E0031	T. S.	E0032		E0033		E0040	
Sampling Location :	X103		X106		X107		X108		X109		X110		X111	
Matrix :	Soil		Soil		Soil		Soil		Soil	-	Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	a Bully	ug/Kg		ug/Kg	
Date Sampled :			TO THE										-	
Time Sampled :	1827		100								100			
%Moisture :	18		34	46	4		16		51	- 24	3		3	
pH:	1000				1.03						160			
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
DICHLORODIFLUOROMETHANE	12	U	49000	UJ	10	U	12	U	29	U	11	U	10	U
1,1,1-TRICHLOROETHANE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
1.1.2.2-TETRACHLOROETHANE	12	UJ	49000	U	10	UJ	12	U	29	U	11	U	10	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHAN	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
1,1,2-TRICHLOROETHANE	12	υ	49000	υ	10	U	12	υ	29	υ	11	U	10	U
1,1-DICHLOROETHANE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
1.1-DICHLOROETHENE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
1,2,4-TRICHLOROBENZENE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
1,2-DIBROMO-3-CHLOROPROPANE	12	UJ	49000	U	10	UJ	12	UJ	29	UJ	11	UJ	10	UJ
1,2-DIBROMOETHANE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
1,2-DICHLOROBENZENE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
1,2-DICHLOROETHANE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
1,2-DICHLOROPROPANE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
1,3-DICHLOROBENZENE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
1,4-DICHLOROBENZENE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
2-BUTANONE	12	UJ	49000	U	10	UJ	4	J	14	J	11	U	10	U
2-HEXANONE	12	UJ	49000	U	10	UJ	12	U	29	U	11	U	10	U
4-METHYL-2-PENTANONE	12	UJ	49000	U	10	UJ	12	U	29	U	11	U	10	U
ACETONE	12	UJ	49000	U	10	U	18	J	120	J	11	U	2	J
BENZENE	12	U	390000		10	U	12	U	29	U	11	U	10	U
BROMODICHLOROMETHANE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
BROMOFORM	12	U	49000	U	10	U	12	UJ	29	UJ	11	UJ	10	UJ
BROMOMETHANE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
CARBON DISULFIDE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
CARBON TETRACHLORIDE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
CHLOROBENZENE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
CHLOROETHANE	12	U	49000	U	10	U	12	UJ	29	UJ	11	UJ	10	UJ
CHLOROFORM	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
CHLOROMETHANE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
CIS-1,2-DICHLOROETHENE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
CIS-1,3-DICHLOROPROPENE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
CYCLOHEXANE	12	UJ		UJ	10	UJ	12	U	29	U	11	U	10	U
DIBROMOCHLOROMETHANE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
ETHYLBENZENE	12	U	5400	J	10	U	12	U	29	U	11	U	10	U
ISOPROPYLBENZENE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
METHYL ACETATE	12	UJ	49000	U	10	UJ	12	U	29	U	11	U	10	U
METHYL TERT-BUTYL ETHER	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
METHYLCYCLOHEXANE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
METHYLENE CHLORIDE	6	J	4200	J	10	UJ	12	U	29	U	11	U	10	U
STYRENE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
TETRACHLOROETHENE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
TOLUENE	12	U	170000	1500	10	U	12	U	29	U	11	U	10	U
TRANS-1,2-DICHLOROETHENE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
TRANS-1,3-DICHLOROPROPENE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
TRICHLOROETHENE	12	U	49000	U	10	U	12	U	29	U	11	U	10	U
TRICHLOROFLUOROMETHANE	12	U	49000	U	10	UJ	12	UJ	29	UJ	11	UJ	10	UJ
VINYL CHLORIDE	12	U	49000	U	10	U	12	U	29	U	11	U		U
XYLENES (TOTAL)	12	U	59000	0	10	U	12	U	29	U	11	U	10	U

Table 2
Volatile Analysis of Soil Samples

In his to the second

V	E0018		E0041		E0042		E0048		E0047		E0047DL		E0049	
Sampling Location :	X103		X112		X113	V.	X114		X115	4	X115		X116	
Matrix:	Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units:	ug/Kg		ug/Kg	114	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	100	Yell			THE PE		13 3						1	
Time Sampled :	her .		1		Page 4				Bat 2				7.60	
%Moisture :	18		0		8	y religi	1	1, 17	24		24		0	
pH:	0.00							7.13			State of the		11	
Dilution Factor :	1.0	180	1.0		1.0		1.0	ésaa	1.0		1.0		1.0	100
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
DICHLORODIFLUOROMETHANE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
1,1,1-TRICHLOROETHANE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
1,1,2,2-TETRACHLOROETHANE	12	UJ	10	U	10	U	17	U	12	U	130	U	16	UJ
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHAN	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
1,1,2-TRICHLOROETHANE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
1,1-DICHLOROETHANE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
1,1-DICHLOROETHENE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
1,2,4-TRICHLOROBENZENE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
1,2-DIBROMO-3-CHLOROPROPANE	12	UJ	10	UJ	10	UJ	17	UJ	12	UJ	130	U	16	UJ
1,2-DIBROMOETHANE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
1,2-DICHLOROBENZENE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
1,2-DICHLOROETHANE	12	U	10	U	10	U	17	U	14		42	J	16	UJ
1,2-DICHLOROPROPANE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
1,3-DICHLOROBENZENE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
1,4-DICHLOROBENZENE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
2-BUTANONE	12	UJ	10	U	10	U	17	U	14	P 7	84	J	16	UJ
2-HEXANONE	12	UJ	10	U	10	U	17	U	12	U	130	U	16	UJ
4-METHYL-2-PENTANONE	12	UJ	10	U	10	U	17	U	12	U	130	U	16	UJ
ACETONE	12	UJ	10	U	10	U	17	U	43	J	330	J	16	UJ
BENZENE	12	U	10	U	10	U	17	U	420		1500		16	UJ
BROMODICHLOROMETHANE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
BROMOFORM	12	U	10	UJ	10	UJ	17	UJ	12	UJ	130	U	16	UJ
BROMOMETHANE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
CARBON DISULFIDE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
CARBON TETRACHLORIDE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
CHLOROBENZENE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
CHLOROETHANE	12	U	10	UJ	10	UJ	17	UJ	12	UJ	130	U	16	UJ
CHLOROFORM	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
CHLOROMETHANE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
CIS-1,2-DICHLOROETHENE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
CIS-1,3-DICHLOROPROPENE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
CYCLOHEXANE	12	UJ	10	U	10	U	17	U	12	U	130	U	16	UJ
DIBROMOCHLOROMETHANE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
ETHYLBENZENE	12	U	10	U	10	U	17	U	13		68	J	16	UJ
ISOPROPYLBENZENE	12	U	10	U	10	U	17	U	15		83	J	16	UJ
METHYL ACETATE	12	UJ	10	U	10	U	17	U	12	U	130	U	16	UJ
METHYL TERT-BUTYL ETHER	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
METHYLCYCLOHEXANE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
METHYLENE CHLORIDE	6	J	2	J	3	J	17	U	12	U	130	UJ	16	UJ
STYRENE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
TETRACHLOROETHENE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
TOLUENE	12	U	10	U	10	U	17	U	35		150		13	J
TRANS-1,2-DICHLOROETHENE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
TRANS-1,3-DICHLOROPROPENE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
TRICHLOROETHENE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
TRICHLOROFLUOROMETHANE	12	U	10	UJ	10	UJ	17	UJ	12	UJ	130	UJ	16	UJ
VINYL CHLORIDE	12	U	10	U	10	U	17	U	12	U	130	U	16	UJ
XYLENES (TOTAL)	12	U	10	U	10	U	17	U	170	PAGE 1	880	E 18	16	UJ

Table 2
Volatile Analysis of Soil Samples

V	E0018		E0049RE	TO COL	E0054		E0054MS	15278	E0054MSD	177	E0055		E0057
Sampling Location :	X103		X116		X117		X117		X117		X118		X119
Matrix:	Soil		Soil		Soil		Soil		Soil		Soil		Soil
Units:	ug/Kg		ug/Kg	5	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg
Date Sampled :			W. A.		100								
Time Sampled :	172		Service 1	- 43				-14					25 114
%Moisture :	18		0		0		0		0		0		0
pH:											Marie I		
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result
DICHLORODIFLUOROMETHANE	12	U	16	UJ	12	U	10	U	10	U	10	U	10
1,1,1-TRICHLOROETHANE	12	U	16	UJ	12	U	10	U	10	U	10	U	10
1,1,2,2-TETRACHLOROETHANE	12	UJ	16	UJ	12	U	10	U	10	U	10	U	10
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHAN	12	U	16	UJ	12	U	10	U	10	U	10	U	10
1,1,2-TRICHLOROETHANE	12	U	16	UJ	12	U	10	U	10	U	10	U	10
1,1-DICHLOROETHANE	12	U	16	UJ	12	U	10	U	10	U	10	U	10
1,1-DICHLOROETHENE	12	U	16	UJ	12	U	32		35		10	U	10
1,2,4-TRICHLOROBENZENE	12	U	16	UJ	12	U	10	U	10	U	10	U	10
1,2-DIBROMO-3-CHLOROPROPANE	12	UJ	16	UJ	12	U	10	U	10	U	10	U	10
1,2-DIBROMOETHANE	12	U	16	UJ	12	U	10	U	10	U	10	U	10
1,2-DICHLOROBENZENE	12	U	16	UJ	12	U	10	U	10	U	10	U	10
1,2-DICHLOROETHANE	12	U	16	UJ	12	U	10	U	10	U	10	U	10
1,2-DICHLOROPROPANE	12	U	16	UJ	12	U	10	U	10	U	10	U	10
1,3-DICHLOROBENZENE	12	U	16	UJ	12	U	10	U	10	U	10	U	10
1,4-DICHLOROBENZENE	12	U	16	UJ	12	U	10	U	10	U	10	U	10
2-BUTANONE	12	UJ	16	UJ	12	U	10	U	10	U	10	U	10
2-HEXANONE	12	UJ	16	UJ	12	U	10	U	10	U	10	U	10
4-METHYL-2-PENTANONE	12	UJ	16	UJ	12	U	10	U	10	U	10	U	10
ACETONE	12	UJ	16	UJ	12	UJ	10	UJ	10	UJ	10	UJ	21
BENZENE	12	U	16	UJ	12	UJ	32		34		10	U	10
BROMODICHLOROMETHANE	12	U	16	UJ	12	U	10	U	10	U	10	U	10
BROMOFORM	12	U	16	UJ	12	U	10	U	10	U	10	U	10
BROMOMETHANE	12	U	16	UJ	12	U	10	U	10	U	10	U	10
CARBON DISULFIDE	12	U	16	UJ	12	U	10	U	10	U	10	U	10
CARBON TETRACHLORIDE	12	U	16	UJ	12	U	10	U	10	U	10	U	10
CHLOROBENZENE	12	U	16	UJ	12	U	34		36		10	U	10
CHLOROETHANE	12	U	- 16	UJ	12	U	10	U	10	U	10	U	10
CHLOROFORM	12	U	16	UJ	12	U	10	U	10	U	10	U	10
CHLOROMETHANE	12	U	16	UJ	12	U	10	IJ	10	U	10	U	10
CIS-1,2-DICHLOROETHENE	12	U	16	UJ	12	U	10	U	10	U	10	U	2
CIS-1,3-DICHLOROPROPENE	12	U	16	UJ	12	U	10	U	10	U	10	U	10
CYCLOHEXANE	12	UJ	16	UJ	12	U	10	U	10	U	10	U	10
DIBROMOCHLOROMETHANE	12	U	16	UJ	12	U	10	U	10	U	10	U	10
ETHYLBENZENE	12	U	16	UJ	12	U	10	U	10	U	10	U	10
ISOPROPYLBENZENE	12	U	16	UJ	12	U	10	U	10	U	10	U	10
METHYL ACETATE	12	UJ	16	UJ	12	U	10	U	10	U	10	U	10
METHYL TERT-BUTYL ETHER	12	U	16	UJ	12	U	10	U	10	U	10	U	10
METHYLCYCLOHEXANE	12	U	16	UJ	12	U	10	U	10	U	10	U	10
METHYLENE CHLORIDE	6	J	16	UJ	12	UJ	10	U	10	U	10	U	
STYRENE	12	U	16	UJ	12	U	10	U	10	U	10	U	10
TETRACHLOROETHENE	12	U	16	UJ	3	1		U		U		U	10
TOLUENE	12	U	7	7		U	10	U	10	0	10		10
TRANS-1,2-DICHLOROETHENE		U	The Real Property lies		12	U	34	11	37	11	10	U	10
	12		16	UJ	12		10	U	10	U	10	U	1
TRANS-1,3-DICHLOROPROPENE TRICHLOROETHENE	12	U	16	UJ	12	U	10	U	10	U	10	U	10
	12	U	16	UJ	12	U	34		35		10	U	10
TRICHLOROFLUOROMETHANE VINYL CHLORIDE	12	U	16	UJ	12	U	10	U	10	U	10	U	10
XYLENES (TOTAL)	12	U	16	N)	12	U	10	U	10	U	10	U	10

Table 2
Volatile Analysis of Soil Samples

V	E0018			E0058		E0059		E0060	
Sampling Location :	X103			X120		X121		X122	
Matrix:	Soil			Soil		Soil		Soil	
Units:	ug/Kg			ug/Kg		ug/Kg	- 574	ug/Kg	
Date Sampled :		3		19 14		1	Y 4 1		
Time Sampled :	1	4		3.74				100	
%Moisture :	18			0		0		0	
pH:									
Dilution Factor :	1.0	in all		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Flag	Result	Flag	Result	Flag	Result	Flag
DICHLORODIFLUOROMETHANE	12	U	U	10	U	10	U	17	U
1,1,1-TRICHLOROETHANE	12	U	U	10	U	10	U	17	U
1,1,2,2-TETRACHLOROETHANE	12	UJ	U	10	U	10	U	17	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHAN	12	U	U	10	U	10	U	17	U
1,1,2-TRICHLOROETHANE	12	U	U	10	U	10	U	17	U
1,1-DICHLOROETHANE	12	U	U	10	U	10	U	17	U
1,1-DICHLOROETHENE	12	U	U	10	U	10	U	17	U
1.2.4-TRICHLOROBENZENE	12	U	U	10	U	10	U	17	U
1,2-DIBROMO-3-CHLOROPROPANE	12	UJ	U	10	U	10	U	17	U
1,2-DIBROMOETHANE	12	U	U	10	U	10	U	17	U
1,2-DICHLOROBENZENE	12	U		10	U	10	U	17	U
1,2-DICHLOROETHANE	12	U	U	10	U	10	U	17	U
1.2-DICHLOROPROPANE	12	U	U	10	U	10	U	17	U
1,3-DICHLOROBENZENE	12	U	U	10	U	10	U	17	U
1,4-DICHLOROBENZENE	12	u	U	10	N	10	U	17	U
2-BUTANONE	12	UJ	U	10	U	3	J	17	U
2-HEXANONE	100,000	UJ	U	10	U	10	U	17	U
	12		U		U		U	100	U
4-METHYL-2-PENTANONE	12	UJ		10		10		17	U
ACETONE	12	UJ	J	10	UJ	13	UJ	17	_
BENZENE	12	U	U	10	U	10	UJ	17	U
BROMODICHLOROMETHANE	12	U	U	10	U	10	U	17	U
BROMOFORM	12	U	U	10	U	10	U	17	U
BROMOMETHANE	12	U	U	10	U	10	U	17	U
CARBON DISULFIDE	12	U	U	10	U	10	U	17	U
CARBON TETRACHLORIDE	12	U	U	10	U	10	U	17	U
CHLOROBENZENE	12	U	U	10	U	10	U	17	U
CHLOROETHANE	12	U	U	10	U	10	U	17	U
CHLOROFORM	12	U	U	10	U	10	U	17	U
CHLOROMETHANE	12	U	U	10	U	10	U	17	U
CIS-1,2-DICHLOROETHENE	12	U	J	10	U	10	U	17	U
CIS-1,3-DICHLOROPROPENE	12	U	U	10	U	10	U	17	U
CYCLOHEXANE	12	UJ	U	10	U	10	U	17	U
DIBROMOCHLOROMETHANE	12	U	U	10	U	10	U	17	U
ETHYLBENZENE	12	U	U	10	U	10	U	17	U
ISOPROPYLBENZENE	12	U	U	10	U	10	U	17	U
METHYL ACETATE	12	UJ	U	10	U	10	U	17	U
METHYL TERT-BUTYL ETHER	12	U	U	10	U	10	U	17	U
METHYLCYCLOHEXANE	12	U	U	10	U	10	U	17	U
METHYLENE CHLORIDE	6	J	UJ	10	U	10	UJ	17	U
STYRENE	12	U	U	10	U	10	U	17	U
TETRACHLOROETHENE	12	U	U	10	U	10	U	17	U
TOLUENE	12	U	U	10	U	1	J	17	U
TRANS-1,2-DICHLOROETHENE	12	U	J	10	U	10	U	17	U
TRANS-1,3-DICHLOROPROPENE	12	U	U	10	U	10	U	17	U
TRICHLOROETHENE	12	U	U	10	U	10	U	17	U
TRICHLOROFLUOROMETHANE	12	U	UJ	10	U	10	U	17	U
VINYL CHLORIDE	12	U	U	10	U	10	U	17	U
XYLENES (TOTAL)	12	U	U	10	U	10	U	17	U

Table 3
Semi-Volatile Analysis of Soil Samples

Sample Number :	E0018		E0015	Ti	E0021	170	E0022		E0022DL		E0023		E0023DI		E0023RE		E0024		E0031		E0032		E0032DL		E0033		E0040	
Sampling Location :	X103 Soil		X102		X104		X105		X105 Soil		X106 Soil		X106 Soil		X106 Soil		X107 Soil		X108 Soil		X109 Soil		X109 Soil		X110 Soil	4	X111 Soil	
Matrix:			Soil		Soil		Soil		ug/Kg						ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	11	ug/Kg	
Units : Date Sampled :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/kg		ug/Kg		ug/Kg		ugrky		ug/kg	10	ug/kg		ugrity		ugrky		ugning		uging	
Time Sampled :										7.9	100						63		191				150		0.77			
%Moisture :	13		16		33		43		43		39		39		39		6		16		51	. 48	51		3		8	
pH:	6.5		6.1		6.4		6.3		6.3		6.5		6.5		6.5		6.5		6.3		6.5		6.1		6.7		6.6	
Dilution Factor :	1.0		1.0		1.0		1.0		50.0		1.0		10.0		1.0		1.0		1.0		1.0		20.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
1,1'-BIPHENYL	380	U	390	u	490	U	24000		800000	U	14000	J	160000	U	14000	J	11000	U	390	U	660	J	13000	U	340	U	360	U
2,2'-OXYBIS(1- CHLOROPROPANE)	380	U	390	U	490	U	16000	U	800000	U	16000	UJ	160000	U	16000	UJ	11000	U	390	U	670	U	13000	U	340	U	360	U
2,4,5-TRICHLOROPHENOL	950	U	990	U	1200	U	40000	U	2000000	U	41000	U	410000	U	41000	UJ	27000	U	990	U	1700	U	34000	U	860	U	900	U
2,4,6-TRICHLOROPHENOL	380	Ų	390	U	490	U	16000	U	800000	U	16000	U	160000	U	16000	IJ	11000	U	390	U	670	U	13000	U	340	U	360	100
2,4-DICHLOROPHENOL	380	U	390	U	490	U	16000	U		U	16000	UJ	160000	U	16000	UJ	11000	U	390	U	670	U	13000	U	340	U	360	n
2,4-DIMETHYLPHENOL	380	U	390	U	490	U	1600	J	800000	U	16000	UJ	160000	U	16000	UJ	11000	U	390	U	69	J	13000	U	340	U	360	U
2,4-DINITROPHENOL	950 380	U	990	U	1200	UJ	40000	UJ	2000000	UJ	41000	UJ	410000	U	41000	UJ	27000	UJ	990	UJ	1700 670	U	34000	U	860	n	900	n
2,4-DINITROTOLUENE 2,6-DINITROTOLUENE	380	U	390	U	490	U	16000	U	800000	U	16000	U	160000	U	16000	na	11000	U	390	U	670	U	13000	U	340	U	360 360	U
2-CHLORONAPHTHALENE	380	U	390	U	490	U	16000	U	800000	U	16000	U	160000	U	16000	UJ	11000	U	390	U	670	U	13000	U	340	U	360	U
2-CHLOROPHENOL	380	U	390	U	490	U	16000	U	800000	U	16000	UJ	160000	U	16000	UJ	11000	U	390	u	670	u	13000	U	340	U	360	U
2-METHYLNAPHTHALENE	380	U	390	U	490	U	95000		120000	J	43000	J	40000	J	38000	1	11000	U	390	U	2700		2100	J	44	J	360	U
2-METHYLPHENOL	380	U	390	U	490	u	16000	U	800000	U	16000	UJ	160000	U	16000	UJ	11000	U	390	U	670	U	13000	U	340	u	360	U
2-NITROANILINE	950	U	990	U.	1200	U	40000	U	2000000	U	41000	U	410000	U	41000	UJ	27000	U	990	U	1700	U	34000	U	860	U	900	U
2-NITROPHENOL	380	U	390	U	490	U	16000	U	800000	U	16000	UJ	160000	U	16000	UJ	11000	U	390	U	670	U	13000	U	340	U	360	U
3,3'-DICHLOROBENZIDINE	380	U	390	U	490	U	16000	U	800000	U	16000	U	160000	U	16000	UJ	11000	U	390	U	670	U	13000	U	340	U	360	U
3-NITROANILINE	950	U	990	U	1200	u	40000	U	2000000	U	41000	U	410000	U	41000	UJ	27000	U	990	U	1700	U	34000	U	860	U	900	U
4,6-DINITRO-2-METHYLPHENOL	950	U	990	U	1200	U	40000	UJ	2000000	UJ	41000	UJ	410000	UJ	41000	UJ	27000	UJ	990	U	1700	U	34000	U	860	U	900	U
4-BROMOPHENYL-PHENYLETHER	380	U	390	n	490	U	16000	UJ	8000000	U	16000	UJ	160000	U	16000	UJ	11000	U	390	U	670	U	13000	U	340	U	360	U
4-CHLORO-3-METHYLPHENOL	380	U	390	U	490	U	16000	U	8000000	U	16000	UJ	160000	U	16000	UJ	11000	U	390	U	670	U	13000	U	340	U	360	
4-CHLOROANILINE 4-CHLOROPHENYL-PHENYL ETHEI	380	U	390	U	490	n	16000	U	800000	U	16000	UJ	160000	U	16000	UJ	11000	U	390	U	670	U	13000	U	340	U	360	U
4-METHYLPHENOL	380	11	390	U	490	U	16000	U	800000	U	16000	U	160000	U	16000	nn nn	11000	U	390	U	670 160	U	13000	U	340	U	360 360	U
4-NITROANILINE	950	U	990	U	1200	U	40000	U	2000000	U	41000	U	410000	"	41000	UJ	27000	U	990	U	1700	U	34000	U	860	U	900	u
4-NITROPHENOL	950	UJ	990	UJ	1200	U	40000	11.1	2000000	UJ	41000	UJ.	410000	UJ	41000	111	27000	UJ	990	11	1700	11	34000	UJ	860	U	900	U
ACENAPHTHENE	380	U	390	U	180	J	13000	J	800000	U	6100	J	160000	U	6500	J	11000	U	390	U	820		13000	U	340	u	360	
ACENAPHTHYLENE	380	U	67	J	430	J	83000		90000	J	30000		40000	3	31000	J	11000	U	390	U	7900	No.	4700	J	340	U	360	U
ACETOPHENONE	380	U	390	U	490	U	470000		360000	J	140000	J	190000		140000	J	11000	u	120	J	2800		13000	U	66	J	360	U
ANTHRACENE	380	U	390	U	480	J	130000	J	120000	J	51000	J	63000	J	51000	J	11000	U	390	U	11000		8900	J	340	U	360	u
ATRAZINE	380	U	390	U	490	U	16000	UJ	800000	U	16000	UJ	160000	U	16000	UJ	11000	U	390	U	670	U	13000	U	340	U	360	U
BENZALDEHYDE	380	U	47	J	490	U	6000	J	800000	U	16000	UJ	160000	U	16000	UJ	11000	U	390	U	740		13000	U	51	J	360	U
BENZO(A)ANTHRACENE	110	J	160	J	1200		270000		250000	J	110000		120000	J	110000	J	11000	U	390	U	24000		23000		100	J	360	U
BENZO(A)PYRENE	120	J	180	J	940	-	170000		170000	J	64000		87000	J	63000		11000	U	390	U	18000		17000		100	J	360	U
BENZO(B)FLUORANTHENE BENZO(G,H,I)PERYLENE	120	1	180	J	1400		240000		180000	1	92000		97000	1	85000		11000	U	390	U	32000		27000		130	J	360	
BENZO(K)FLUORANTHENE	150	J	150	1	720 920		170000		88000 210000	J	41000		58000 64000	1	38000		11000	U	390	U	11000		14000		82	1	360	U
BIS(2-CHLOROETHOXY)METHANE	380	U	390	U	490	U	16000	U	800000	U	16000	UJ	160000	U	16000	UJ	11000	U	390	U	670	U	18000	U	110 340	U	360 360	u
BIS-(2-CHLOROETHYL)ETHER	380	U	390	U	490	u	16000	U	800000	U	16000	UJ	160000	u	16000	UJ	11000	U	390	U	670	U	13000	U	340	U	360	U
BIS(2-ETHYLHEXYL)PHTHALATE	380	U	79	J	120	J	16000	UJ	800000	UJ	16900	UJ	160000	UJ	16000	UJ	11000	UJ	390	U	8100		7000	1	770		46	J
BUTYLBENZYLPHTHALATE	380	U	51	J	200	J	16000	U	800000	UJ	16000	U	160000	U	16000	UJ	11000	U	390	U	670	U	13000	U	170	J	360	U
CAPROLACTAM	380	U	73	J	490	U	16000	U	800000	U	16000	UJ	160000	U	16000	UJ	11000	U	390	U	670	U	13000	U	340	U	360	U
CARBAZOLE	380	U	390	U	660		16000	UJ	800000	U	16000	UJ	160000	U	16000	UJ	11000	U	390	U	3700		2700	J	340	U	360	U
CHRYSENE	160	J	220	J	1400		320000		290000	J	120000	The state of	140000	J	130000	1	11000	U	390	U	33000		32000		140	J	360	U
DIBENZO(A,H)-ANTHRACENE	59	J	81		290	J	39000		800000	U	18000		160000	U	14000	J	11000	U	390	U	5600		5000	1	340	U	360	U
DIBENZOFURAN	380	U	390		200	1	130000	100	130000	J	67000		70000	J	69000	J	11000	U	-	U	3300		3100	J	340	U	360	U
DIETHYLPHTHALATE	380		390		490		16000		8000000		16000	U	160000	U	16000	UJ	11000	U		U		U	13000	U	340		360	
DIMETHYLPHTHALATE DI-N-BUTYLPHTHALATE	380	U	390				16000		800000		16000	U	160000	U	16000	UJ	11000	U	500	U	670	U	13000	U	340	U	360	U
DI-N-OCTYLPHTHALATE	380	U	390		490	ניח	16000	UJ	800000	U	16000	UJ	160000	U	16000	UJ	11000	U		U	670 670	U	13000	U	340	U	360	U
FLUORANTHENE	200	J	250	J	3200	100	1100000	1	760000	1	440000	1	390000		440000	1	1300	J		U	67000		13000 63000	0	200	1	360	U
FLUORENE	380	U	390		510		470000		460000	J	220000		240000		230000	J	11000	U		U	11000	601	11000	J	340	n	360	U
HEXACHLOROBENZENE	380	U	390		490	U	16000	UJ	800000	U	16000	UJ	160000	U	16000	UJ	11000	U		U	670	U	13000	U	340	U	360	
HEXACHLOROBUTADIENE	380	U	390	U	490	M	16000	U	800000	U	16000	UJ	160000	U	16000	1000	11000	U		u	100000	U	13000	U	340	U	360	U
HEXACHLOROCYCLO-PENTADIEN	380	U	390	U	490	U	16000	UJ	800000	UJ	16000	UJ	160000	UJ	16000	UJ	11000	UJ	390	U	670	U	13000	U	340	U	360	U
HEXACHLOROETHANE	380	U	390	U	490	UJ	16000	U		U	16000	UJ	160000	U	16000	UJ	11000	U	390	U	670	U	13000	U	340	U	360	U
INDENO(1,2,3-CD)-PYRENE	130	J	180		750		120000		800000		46000		58000	J	41000		11000	U .	390	U	16000		14000	1	87	J	360	U
ISOPHORONE	380	U	390		490		16000	U	800000	U	16000	nı	160000	U	16000	UJ	11000	U		U	670	U	13000	U	340	U	360	U
NAPHTHALENE	The second	U	390		490		520000		460000	J	240000	J	220000		210000	1	11000	U		U	16000		15000		58	J	360	U
NITROBENZENE N-NITROSO DIPHENYLAMINE	10000	U	390	200			16000		800000		16000	UJ	100000	U	16000	UJ	11000	U	-	U		U	13000	U	340	U	360	U
N-NITROSO DIPHENYLAMINE N-NITROSO-DI-N PROPYLAMINE	380	U .	390		490	U	16000		8000000		16000	UJ	160000		16000		and the said	U		U	-	U	13000	U	340		360	
PENTACHLOROPHENOL	950	U	390 990	U	490 1200	U	16000 40000		800000		16000	UJ	160000	U	16000			U		U	670		13000	U		U	360	U
PHENANTHRENE	69	J	120	J	2700	9	1600000	1	1200000	U	41000 610000	UJ	410000 560000	U	41000	UJ	- CONTRACTOR	U		U	or other Designation of the last	U	34000	U	860	U	900	U
PHENOL	380	U	390	u	490	U	7000	J	800000	II	2500		160000	U	2100	1	11000	U		U	41000 330	J	39000	11	120	11	360	U
PYRENE	170		260		2000		600000		510000		210000	1000	240000	J	210000		11000	U	390	U	45000	U	13000	U	340	U	360	U

Table 3
Semi-Volatile Analysis of Soil Samples

E0041		E0042		E0048		E0047		E0047DL		E0049		E0054		E0055		E0057		E0058		E0059		E0060 X122	
X112		X113		X114		X115		X115	7	X116		X117		X118 Soil		X119		X120 Soil		X121 Soil		X122 Soil	
Soil ıg/Kg		Soil ug/Kg		Soil ug/Kg	(-1	Soil ug/Kg		Soil ug/Kg		Soil ug/Kg		Soil ug/Kg		ug/Kg		Soil ug/Kg		ug/Kg		ug/Kg		ug/Kg	
														2									
1		9		1		26		26		6		0		7		13		4		5		2	
6.8		6.9		6.5	100	6.3		6.3		6.3		7.3	-6	6.5		6.7		6.3	-	6.5		6.5	
1.0	_	1.0		1.0		1.0		5.0	_	1.0		1.0		1.0	_	1.0		1.0		1.0		1.0	
Result	Flag		Flag	Result	Flag	Result	Flag		Flag	-	Flag	Result	Flag		Flag	Result	Flag	Result	Flag	Result	Flag	Result	
0000	U	10000	U	10000	U	120 450	IJ	2200	U	11000	U	10000	U	350 350	U	380	U	340	U	350 350	U	10000	U
5000	U	25000	U	25000	U	1100	U	5600	U	27000	U	25000	U	890	U	950	U	860	U	870	U	26000	U
0000	U	10000	U	10000	U	450	U	2200	U	11000	U	10000	U	350	U	380	U	340	U	350	U	10000	U
0000	U	10000	U	10000	U	450	U	2200	U	11000	U	10000	U	350	U	380	U	340	U	350	U	10000	U
5000	U	10000	U	10000	U	450 1100	U	2200 5600	U	11000 27000	U	10000	U	350 890	U	380 950	U	340 860	U	350 870	U	26000	U
0000	U	10000	U	10000	U	450	U	2200	U	11000	U	10000	U	350	U	380	U	340	U	350	U	10000	U
0000	U	10000	U	10000	U	450	U	2200	U	11000	U	10000	U	350	U	380	U	340	u	350	U	10000	U
0000	U	10000	U	10000	U	450	U	2200	U	11000	U	10000	U	350	U	380	U	340	U	350	U	10000	U
0000	U	10000	U	10000	U	450 880	U	2200 950	J	11000	U	10000	IJ	350 350	U	380	U	70	n	350 54	n	10000	U
0000	u	10000	U	10000	U	46	J	2200	U	11000	U	10000	U	350	U	380	U	340	U	350	U	10000	U
5000	U	25000	U	25000	U	1100	U	5600	U	27000	U	25000	U	890	U	950	U	860	U	870	U	26000	U
0000	U	10000	U	10000	U	450 450	U	2200	U	11000	U	10000	U	350 350	U	380	U	340	U	350 350	U	10000	U
5000	U	25000	U	25000	U	1100	U	5600	U	27000	U	25000	U	890	U	950	U	860	U	870	U	26000	U
5000	U	25000	U	25000	U	1100	U	5600	U	27000	U	25000	U	890	U	950	U	860	U	870	U	26000	U
0000	U	10000	U	10000	U	450	U	2200	U	11000	u	10000	U	350	U	380	U	340	u	350	U	10000	U
0000	U	10000	U	10000	U	450 450	U	2200	U	11000	U	10000	n	350 350	U	380	U	340	U	350 350	U	10000	U
0000	U	10000	U	10000	U	450	U	2200	U	11000	U	10000	U	350	U	380	U	340	U	350	U	10000	U
0000	U	10000	U	10000	U	100	J	2200	U	11000	u	10000	U	350	U	380	U	340	U	350	U	10000	U
5000	U	25000	U	25000	U	1100	U	5600	U	27000	U	25000	U	890	U	950	U	860	U	870	U	26000	U
25000	n	10000	U	10000	UJ	1100	1 UJ	5600 2200	n	11000	n	10000	N	350	U	950 380	n	340	UJ	870 350	n	10000	U
0000	U	10000	U	2600	J	340	J	350	J	11000	U	10000	U	350	U	380	U	120	J	61	J	10000	U
0000	U	10000	U	10000	U	2300		2300		2100	J	1700	J	350	U	380	U	340	U	350	U	1500	J
0000	U	10000	U	10000	U	640 450	U	720	n	11000	U	10000	U	350 350	U	380	U	98 340	U	120 350	J	10000	U
0000	U	10000	U	10000	U	450	U	2200	U	11000	U	10000	U	350	U	380	U	340	u	350	U	10000	U
1400	J	5500	J	7600	J	1500		1700	J	1700	J	10000	U	350	U	380	U	380		670		5000	J
10000	U	7900	3	5400 8100	J	990		1100	J	11000	U	10000	U	350	U	380	U	340		630		3900	1
2000	U	7900	1	4600	J	1500		1000	1	1500	U	10000	U	350 350	U	380	U	480 330	J	560 480		10000	U
10000	U	6500	J	6900	J	1200		1400	J	11000	U	10000	U	350	U	380	U	420		570		4400	J
0000	U	10000	u	10000	U	450	U	2200	U	11000	U	10000	U	350	U	380	U	340	u	350	U	10000	U
10000	U	10000	U	10000	U	450 450	U	2200 2200	U	11000	U	10000	U	350 68	Ŋ	380 500	U	340	U	350 100	J	10000	U
0000	U	10000	U	10000	u	450	U	2200	U	11000	u	10000	U	350	U	380	U	340	U	350	U	10000	U
0000	U	10000	U	10000	U	450	U	2200	U	11000	U	10000	U	350	U	380	U	340	U	350	U	10000	U
2200	U	10000 7600	U	10000	U	190	J	2200 2600	U	11000	U	10000	U	350 350	U	380	U	340 550	U	350 790	U	10000	U
0000	U	1500	3	1000	1	440	J	2200	U	11000	U	10000	U	350	U	380	U	130	J	38	J	10000	U
0000	U	10000	U	10000	U	240	J	230	J	1200	J	10000	U	350	U	380	U	40	J	350	U	10000	U
0000	U	10000	U	10000	U	450 450	U	2200	U	11000	U	10000	U	350	U	380	U	340	U	350	U	10000	U
0000	U	10000	U	10000	U	450	U	2200 2200	U	11000	U	10000	U	350 350	U	380	U	340	U	350 350	U	10000	
0000	U	10000	U	10000	U	450	U	2200	U	11000	U	10000	u	350	U	380	U	340	U	350	U	10000	u
2800	J	9000	n	14000	U	2700	11	3000	J	2600	J	10000	U	350	U	380	U	710		910		7500	J
0000	U	10000	U	10000	U	450 450	U	720	n	11000	U	1000	U	350 350	U	380	U	340 340	U	350 350	U	10000	U
0000	U	10000	U	10000	u	450	U	2200	U	11000	U	10000	U	350	U	380	U	340	U	350	U	10000	U
0000	U	10000	U	10000	U	450	U	2200	UJ	11000	UJ	10000	UJ	350	UJ	380	UJ	340	UJ	350	UJ	10000	U
0000	U	10000 7400	U	10000	U	450 900	U	2200 980	J	11000	U	10000	U	350 350	U	380	U	340	n n	350 460	u	10000	J
0000	U	10000	U	10000	U	450	U	2200	U	11000	U	10000	U	350	U	380	U	340	U	350	U	10000	U
0000	U	10000	U	1200	J	9600		11000		30000		23000		350	U	380	U	70	J	120	J	10000	
0000	U	10000	U	10000	U	450 450	U	2200 2200	U	11000	U	10000	U	350	U	380	U	340	U	350	U	10000	U
0000	U	10000	u	10000	U	450	U	2200	U	11000	U	10000	U	350 350	U	380	U	340	U	350 350	U	10000	U
5000	U	25000	U	25000	U	1100	U	5600	U	27000	U	25000	UJ	890	U	950	U	860	U	870	U	26000	U
0000	U	4100	J	4600	J	3300		3600		3000	J	2200	1	350	U	380	U	440		610		2300	J
2100	U	10000 7400	U	10000	U	120	J	2200	U	11000	U	10000	UJ UJ	350 350	U	380	U	340 530	U	350 750	U	10000	U

Table 4
Inorganic Analysis of Soil Samples

Sample Number :	ME0018		ME0008		ME0015		ME0021		ME0022	No.	ME0023	-	ME0024		ME0031		ME0032	
Sampling Location :	X103		X101		X102		X104		X105		X106		X107		X108		X109	
Matrix:	Soil		Soil		Soil		Soil		Soil									
Units:	mg/Kg	- 1	mg/Kg	13	mg/Kg		mg/Kg		mg/Kg		mg/Kg	- 1	mg/Kg	- 4	mg/Kg		mg/Kg	
Date Sampled :	10/14/2003		10/14/2003		10/14/2003		10/14/2003		10/14/2003	kur á	10/14/2003		10/14/2003		10/15/2003		10/15/2003	3
Time Sampled :	14:00		12:00		13:30		14:30		15:00		15:00		15:30		09:30		10:30	
%Solids :	76		89.5		73.1		63.6		49.9		50.9	A	82.6	1	78.9		42	
Dilution Factor :	1		1		1	4.10	1		1	Hiel	1		1		1		1	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag								
ALUMINUM	26800		5870		20000		9020		4600		4720		9170		18500		20500	
ANTIMONY	1.9	J	0.73	J	1.4	J	1.2	J	1.1	J	1.5	J	14.5	U	1.4	J	28.6	U
ARSENIC	0.77	- 4	1.1		4.8	16.5	1.5		20.2		12.7		6.6		6.5		5.2	
BARIUM	273		32.4		201		123		242		276		173		132		184	
BERYLLIUM	3.6	13.	0.47		2.3		1.4		0.69		0.69		0.51		1.3		3.6	
CADMIUM	0.69	J	0.39	J	2.7	J	0.95	J	0.28	J	0.11	J	0.72	J	1.5	100	2	
CALCIUM	193000		102000		74500	170	72900		83600		99500		90300		19200		77400	
CHROMIUM	5.9		6.3		14.8		6.1		1.8		1.8		12.8		22		11.8	
COBALT	3.1		3		5.8		3.3		0.64	100	0.64		5.6		10.1		4.6	
COPPER	38		4.4		42.2		59.6		28		18.5		20.3		20.7		130	
IRON	8670		7750		27600		10500	550	3330		3070		14300		26000		20400	
LEAD	21.7		2		66.6		30.6		42.1		31.1		28.8		21.4	J	178	J
MAGNESIUM	41600		60300	3	12200		34800		16100	1	16600	1110	50900		8960		9710	
MANGANESE	1900		328		1170		641		485		478		345		470	J	1110	J
MERCURY	0.13	U	0.11	U	0.12		0.14		0.2	U	0.2	U	0.12		0.06		2.4	
NICKEL	4.6		5.2		13.1		5.3		0.87		0.82		14.4		19.7		10.3	
POTASSIUM	3110		2660		3360		2830		188		166		2520		4250		2550	
SELENIUM	9.2	U	4.3		2.2		1.6		25.3		18.2		8.5	U	4.2		11.1	
SILVER	0.32	J	2.2	U	0.1	J	0.17	J	4	U	3.9	U	2.4	U	0.09	J	0.58	J
SODIUM	1020		139		543		351		376		385		455		166		1120	
THALLIUM	7.8	1	1.3		6.1		3.7	Z.H.	2.1		1.6		2.6		4.4		8.9	
VANADIUM	10.1		9.7		23.6		9.1		1.1		1.1		24.5		32.9		15.9	1
ZINC	48.6		13.3		338		85.4		16.6		5.9		70.4		75.3	J	576	J
CYANIDE	3.7		0.23		7		1		1.8		4.1		0.4		0.39		17.3	

Table 4
Inorganic Analysis of Soil Samples

Sample Number :	ME0018		ME0033		ME0040		ME0041		ME0042		ME0048		ME0047		ME0049	1
Sampling Location :	X103		X110		X111	4.1	X112		X113		X114		X115		X116	
Matrix:	Soil		Soil	0.1	Soil											
Units:	mg/Kg		mg/Kg	7.4	mg/Kg		mg/Kg	16 2								
Date Sampled :	10/14/2003		10/15/2003		10/15/2003		10/15/2003		10/15/2003		10/15/2003		10/15/2003		10/16/2003	
Time Sampled :	14:00		11:00		12:30		13:00		13:30		15:30		16:30		09:00	
%Solids :	76		82.3		84.1		89.2		81.5		87.4		61.3	ed.	77.5	
Dilution Factor:	1		1		1.0		1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag														
ALUMINUM	26800		16700		7090		17700		10300		3670		5890		2730	
ANTIMONY	1.9	J	14.6	U	14.3	U	4.9	J	11.5	J	2.2	J	19.6	U	2.4	J
ARSENIC	0.77		5		3.6	U	3.5		5.9		3.8		5.6		9.8	
BARIUM	273		123		24.3		295		212		246		126		90.9	
BERYLLIUM	3.6		2.4	- 7	0.44		2.4	170	1.7		0.62		0.26		0.67	
CADMIUM	0.69	J	1.3		0.27		3.0		2.8		1.5		0.17		2.1	
CALCIUM	193000		162000		105000	2.4	77500	500	42900		14100		26600		2750	
CHROMIUM	5.9		5.4		10.8		18.7		15.7		7.9		14.7		11.9	
COBALT	3.1		3.3	1999	2.1		4.8	100	4.8		3.4		0.83		4.3	
COPPER	38		50.1		1.6		96.2	-	87.6		20.4		29.8		28.7	
IRON	8670		20400		7730		38100		63100		12600		1980		16300	
LEAD	21.7		79.4	J	1.0	J	168	J	247	J	39.9	J	26.5	J	27.3	J
MAGNESIUM	41600		85700		65900		29600		15700		2880		2460		546	
MANGANESE	1900		1100	J	184		1210		1280		254		48.7		583	
MERCURY	0.13	U	0.08		0.35		0.11	U	0.27		0.28		0.17		0.35	
NICKEL	4.6		6.8		5.4		31.1		13.8		10.7		3.6		10.8	
POTASSIUM	3110	130	2110		2590		2240		1900		644		1970		397	1
SELENIUM	9.2	U	3.4		8.3	U	3.6		25.8	U	2.4		11.4	U	2.7	
SILVER	0.32	J	0.3	J	2.4	U	0.44	J	0.15	J	2.3	U	3.3	U	0.16	J
SODIUM	1020		1100		142		930		474		236		147		166	
THALLIUM	7.8		6.5		0.78		4.3		4.4		1.1	1	8.2	U	1.9	
VANADIUM	10.1		10		10.6		15.8		23.6		8.3		16.3		6.7	
ZINC	48.6		707	J	13.7	J	257	J	417	J	67.2	J	16.9	J	130	J
CYANIDE	3.7		3.9		0.27		2.8		1.5		0.38		1.6		1.1	

Table 4
Inorganic Analysis of Soil Samples

Sample Number :	ME0018		ME0054	19.3	ME0054D		ME0054S		ME0055	1-4	ME0057		ME0058		ME0059		ME0060	
Sampling Location :	X103		X117		X117	114	X117		X118		X119		X120		X121		X122	
Matrix:	Soil		Soil	² - 5	Soil		Soil		Soil									
Units:	mg/Kg		mg/Kg	- 4	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	10/14/2003		10/16/2003		10/16/2003		10/16/2003		10/16/2003		10/16/2003		10/16/2003		10/16/2003		10/16/2003	3
Time Sampled :	14:00		10:00		10:00		10:00		11:00		12:00		13:00		13:30		14:00	
%Solids :	76		93.1		93.0		93.1		84.8		78.1		85.4		80.9	S. 45	87.5	
Dilution Factor :	1		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	1
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag										
ALUMINUM	26800		6780		6440		11500		9690		14700		16300		3090		5670	
ANTIMONY	1.9	J	6.0	J	64.4	U	7.3		1.3	J	0.76	J	2.6	J	14.8	R	0.54	J
ARSENIC	0.77	16.5	7.4	J	8.7		16.2		3.5	J	3.2	J	14.5	J	4.7	J	10.3	J
BARIUM	273		96.4		98.8		567		32.1		63.0		184		80.5		117	
BERYLLIUM	3.6		1.2		1.3		12.4	-	0.60		0.94	207	3.5		0.89		0.76	
CADMIUM	0.69	J	13.5	J	3.0		13.3		0.50	J	0.82	J	1.3	J	1.0	J	2.5	J
CALCIUM	193000		18200		19500	133	46000		99100		51800		51800		22300		35700	
CHROMIUM	5.9		48.7	J	6.9		47.7		11.5	J	19.3	J	11.7	J	5.8	J	16.4	J
COBALT	3.1		6.7		6.1		106		4.9	100	7.9	- 6	9.4	1	5.8	100	4.9	- 40
COPPER	38		21.5		21.7		75.6		5.0		24.1		54.4		22.8		43.3	
IRON	8670		108000		128000	HE	106000		13200	38	20600	4	26000		30600		38300	
LEAD	21.7		40.5		31.3		32.7		3.9		10.8		38.4		28.4		119	
MAGNESIUM	41600		7320		7790		13500	319	61400		33100		20700		11000		6740	
MANGANESE	1900		1140		1400		1130		309		396		580		399		628	
MERCURY	0.13	U	0.070	J	0.060		0.10		0.060	J	0.080	J	0.050	J	0.060	J	0.59	J
NICKEL	4.6		5.2		5.0		103		10.4		20.2	321	21.6		11.5		11.6	
POTASSIUM	3110		561		636		544		2610		3880		2080		715		898	
SELENIUM	9.2	U	18.7	J	9.7		17.2		8.3	R	1.4	J	1.9	J	3.6	J	4.9	J
SILVER	0.32	J	0.16	J	0.19		10.5		2.4	U	0.19	J	0.20	J	0.090	J	0.33	J
SODIUM	1020		70.8		122		176		135		190		1170		216		340	1
THALLIUM	7.8	1000	9.1	J	9.2		16.3		1.1	J	2.1	J	6.7	J	3.1	J	3.9	J
VANADIUM	10.1		129	J	24.9		127		18.3	J	25.5	J	26.2	J	14.3	J	14.2	J
ZINC	48.6		144	J	76.0		141		19.3	J	49.7	J	291	J	83.7	J	236	J
CYANIDE	3.7		0.20		0.20		6.0	343	0.31		0.18		0.90		0.78		1.4	1

Table 5
Volatile Analysis of Waste Samples

Sample Number :	E0018		E0029		E0030		E0030DL		E0030RE		E0034		E0034DL		E0061		E0061DL	
Sampling Location :	X103		X301		X302	4.14	X302		X302		X303		X303		X304		X304	
Matrix:	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units:	ug/Kg	4	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	백념	ug/Kg		ug/Kg		ug/Kg	
Date Sampled :			I I I I Day		4.5									1-4				
Time Sampled :			3.74.2										1977					4.3
%Moisture :	18		0		0		0		0		50		50		0		0	
pH:	1 49 04 10		EL 3	TV	- 1		Section 1		1111	4	12.52				1			
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
DICHLORODIFLUOROMETHANE	12	U	1300	U	1300	UJ	65000	UJ	1300	UJ	2600	UJ	21000	UJ	1300	U	26000	UJ
CHLOROMETHANE	12	U	1300	UJ	1300	U	65000	UJ	1300	U	2600	U	21000	U	1300	UJ	26000	U
VINYL CHLORIDE	12	U	1300	U	1300	U	65000	UJ	1300	U	2600	U	21000	U	1300	U	26000	U
BROMOMETHANE	12	U	1300	U	1300	U	65000	UJ	1300	U	2600	U	21000	U	1300	U	26000	U
CHLOROETHANE	12	U	1300	U	1300	U	65000	UJ	1300	U	2600	U	21000	U	1300	U	26000	U
TRICHLOROFLUOROMETHANE	12	U	1300	UJ	1300	U	65000	UJ	1300	U	2600	U	21000	U	1300	U	26000	U
1,1-DICHLOROETHENE	12	U	1300	U	1300	U	65000	U	1300	U	2600	U	21000	U	1300	UJ	26000	U
ACETONE	12	UJ	1300	U	1300	U	65000	U	3300	J	1600	J	21000	U	580	J	26000	U
CARBON DISULFIDE	12	U	1300	UJ	2200	J	65000	U	2000	J	2600	U	21000	U	4500	J	26000	U
METHYL ACETATE	12	UJ	1300	UJ	55000	J	65000	U	57000	J	710	J	21000	U	27000	J	26000	U
2-BUTANONE	12	UJ	1300	U	3200	J	65000	U	1300	U	2600	U	21000	U	1300	U	26000	U
CYCLOHEXANE	12	UJ	1300	UJ	12000	J	65000	U	11000	J	820	J	21000	UJ	4200	J	26000	UJ
BENZENE	12	U	23000	J	800000	J	610000		900000	J	210000	J	240000		1400000	J	450000	
TRICHLOROETHENE	12	U	1300	U	1300	U	65000	U	1300	U	2600	U	21000	U	1300	UJ	26000	U
METHYLCYCLOHEXANE	12	U	1300	U	15000	J	65000	U	14000	J	3300		3400	J	8800	J	26000	U
4-METHYL-2-PENTANONE	12	UJ	1300	U	910	J	65000	U	1200	J	2600	U	21000	U	1300	U	26000	U
TOLUENE	12	U	19000	J	660000	J	270000		790000	J	130000	J	140000		840000	J	120000	
2-HEXANONE	12	UJ	1300	U	1300	J	65000	U	1600	J	2600	U	21000	U	1300	U	26000	U
CHLOROBENZENE	12	U	1300	U	1300	U	65000	U	1300	U	2600	U	21000	U	140	J	26000	U
ETHYLBENZENE	12	U	630	J	83000	J	65000	U	90000	J	7600		7800	J	27000	J	1700	J
XYLENES (TOTAL)	12	U	22000		940000	J	130000		1100000	J	150000		150000		410000	J	28000	
STYRENE	12	U	4700		1300	U	65000	U	1300	U	2600	U	21000	U	1300	U	26000	U
ISOPROPYLBENZENE	12	U	1300	U	66000	J	65000	U	73000	J	26000		25000		2100	J	26000	U
1,2-DIBROMO-3-CHLOROPROPANE	12	UJ	1300	UJ	1300	U	65000	U	1300	U	2600	U	21000	U	1300	UJ	26000	U

Table 6
Semi-Volatile Analysis of Waste Samples

Sample Number :	E0018		E0029		E0029DL		E0030		E0030DL	
Sampling Location :	X103	10	X301		X301		X302		X302	
Matrix:	Soil		Soil		Soil		Soil		Soil	
Units:	ug/Kg		ug/Kg	-63	ug/Kg		ug/Kg		ug/Kg	10.3
Date Sampled :	0			1			100			
Time Sampled :	1									1.0
%Moisture :	13		0		0	100	0		0	
pH:	6.5		6.5		6.5		6.8		6.8	
Dilution Factor :	1.0		5.0		500.0		5.0		500.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
1,1'-BIPHENYL	380	U	170000		770000	J	310000		5000000	U
2,4-DIMETHYLPHENOL	380	U	11000	J	5000000	U	48000	J	5000000	U
2,4-DINITROPHENOL	950	U	130000	UJ	13000000	U	130000	UJ	13000000	U
2,4-DINITROTOLUENE	380	U	50000	UJ	5000000	U	50000	U	5000000	U
2,6-DINITROTOLUENE	380	U	50000	U	5000000	U	50000	U	5000000	U
2-CHLOROPHENOL	380	U	50000	UJ	5000000	U	50000	U	5000000	U
2-METHYLNAPHTHALENE	380	U	530000		3100000	J	1300000	Total S	1700000	J
2-METHYLPHENOL	380	U	16000	J	5000000	U	33000	J	5000000	U
4,6-DINITRO-2-METHYLPHENOL	950	U	130000	U	13000000	U	130000	U	13000000	U
4-CHLORO-3-METHYLPHENOL	380	U	50000	UJ	5000000	U	50000	U	5000000	U
4-METHYLPHENOL	380	U	50000		5000000	U	110000	Z	5000000	U
4-NITROPHENOL	950	UJ	130000	UJ	13000000	UJ	130000	U	13000000	UJ
ACENAPHTHENE	380	U	250000	J	870000	J	230000		5000000	U
ACENAPHTHYLENE	380	U	1500000		4300000	J	510000		5000000	U
ACETOPHENONE	380	U	50000	U	5000000	U	130000		5000000	U
ANTHRACENE	380	U	2000000		5600000		2200000		3600000	J
BENZO(A)ANTHRACENE	110	J	2400000		5500000		1700000		2700000	J
BENZO(A)PYRENE	120	J	1900000		4800000	J	1200000		2200000	J
BENZO(B)FLUORANTHENE	120	J	2200000		3900000	J	1200000		1900000	J
BENZO(G,H,I)PERYLENE	96	J	900000		2700000	J	540000		5000000	U
BENZO(K)FLUORANTHENE	150	J	1100000		2900000	J	960000		2100000	J
CARBAZOLE	380	U	1300000		3700000	J	460000		640000	J
CHRYSENE	160	J	2800000		6700000		1900000		3200000	J
DIBENZO(A,H)-ANTHRACENE	59	J	370000		5000000	U	250000		5000000	U
DIBENZOFURAN	380	U	960000	No. of		J	1200000		1700000	J
DIMETHYLPHTHALATE	380	U	50000	U	5000000	U	50000	U	5000000	U
FLUORANTHENE	200	J	8500000		19000000		5300000		8200000	
FLUORENE	380	U	1800000		7500000		2300000		3500000	J
HEXACHLOROCYCLO-PENTADIENE	380	U	50000	U	5000000	U	50000	U	5000000	U
INDENO(1,2,3-CD)-PYRENE	130	J	1000000		2600000	J	740000		5000000	U
NAPHTHALENE	380	U	4200000	DIE	28000000		9600000		13000000	-
N-NITROSO-DI-N PROPYLAMINE	380	U	50000	UJ	5000000	U	50000	U	5000000	U
PHENANTHRENE	69	J	10000000		28000000		8000000	Marie I	12000000	MAN
PHENOL	380	U	60000		5000000	U	110000		5000000	U
PYRENE	170	J	6100000	J	14000000		3500000		5400000	

Table 6
Semi-Volatile Analysis of Waste Samples

Sample Number :	E0018		E0034		E0034DL		E0061		E0061DL	Г
Sampling Location :	X103		X303		X303		X304		X304	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units:	ug/Kg		ug/Kg	1	ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		EA,								
Time Sampled :							100.754			
%Moisture :	13	1	50	1000	50		0		0	
pH:	6.5		3.5		3.5		2.0		2.0	
Dilution Factor :	1.0		5.0		200.0		10.0		500.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
1,1'-BIPHENYL	380	U	210000		3600000	U	540000		690000	J
2,4-DIMETHYLPHENOL	380	U	91000	U	3600000	U	48000	J	5000000	U
2,4-DINITROPHENOL	950	U	230000	UJ	9100000	U	250000	U	13000000	U
2,4-DINITROTOLUENE	380	U	91000	U	3600000	U	100000	U	4300000	J
2,6-DINITROTOLUENE	380	U	91000	U	4400000		100000	U	5000000	U
2-CHLOROPHENOL	380	U,	91000	U	3600000	U	100000	U	5000000	U
2-METHYLNAPHTHALENE	380	U	790000		790000	J	2100000		3300000	J
2-METHYLPHENOL	380	U	91000	U	3600000	U	43000	J	5000000	U
4,6-DINITRO-2-METHYLPHENOL	950	U	16000	J	9100000	U	250000	U	13000000	U
4-CHLORO-3-METHYLPHENOL	380	U	91000	U	3600000	U	100000	U	5000000	U
4-METHYLPHENOL	380	U	91000	U	3600000	U	140000		5000000	U
4-NITROPHENOL	950	UJ	230000	U	9100000	UJ	250000	UJ	13000000	UJ
ACENAPHTHENE	380	U	290000		3600000	U	310000		660000	J
ACENAPHTHYLENE	380	U	800000		630000	J	650000		1300000	J
ACETOPHENONE	380	U	14000	J	3600000	U	190000		5000000	U
ANTHRACENE	380	U	2500000		2800000	J	3200000		5100000	
BENZO(A)ANTHRACENE	110	J	2600000		2800000	J	3200000		4800000	J
BENZO(A)PYRENE	120	J	1900000		2100000	J	2200000		3500000	J
BENZO(B)FLUORANTHENE	120	J	2200000		1900000	J	2300000		3300000	J
BENZO(G,H,I)PERYLENE	96	J	850000		3600000	U	1200000		1000000	J
BENZO(K)FLUORANTHENE	150	J	1500000		2000000	J	1600000		2900000	J
CARBAZOLE	380	U	450000		3600000	U	660000		920000	J
CHRYSENE	160	J	2900000		3100000	J	3300000		5400000	
DIBENZO(A,H)-ANTHRACENE	59	J	450000		3600000	U	450000		5000000	U
DIBENZOFURAN	380	U	1500000		1400000	J	2300000		3400000	J
DIMETHYLPHTHALATE	380	U	91000	U	3600000	U	100000	U	1800000	J
FLUORANTHENE	200	J	8500000		8700000		12000000	19/24	16000000	
FLUORENE	380	U	3000000		3000000	J	4100000		6000000	
HEXACHLOROCYCLO-PENTADIENE	380	U	91000	U	3600000	U	100000	UJ	5000000	UJ
INDENO(1,2,3-CD)-PYRENE	130	J	1300000		1100000	J	1200000		1100000	J
NAPHTHALENE	380	U	3100000		3500000	J	19000000		25000000	
N-NITROSO-DI-N PROPYLAMINE	380	U	91000	U	3600000	U	100000	U	5000000	U
PHENANTHRENE	69	J	12000000		11000000		17000000		23000000	Med
PHENOL	380	U	91000	U	3600000	U	180000		5000000	U
PYRENE	170	J	5400000		5500000		6500000		9600000	

Table 7
Inorganic Analysis of Waste Samples

Sample Number :	RAL	ME0018		ME0029		ME0030		ME0034		ME0061	
Sampling Location :		X103		X301	17	X302	4 4.	X303	and the second	X304	
Matrix:		Soil		Soil	3-1	Soil		Soil		Soil	1
Units:		mg/Kg	- 66	mg/Kg		mg/Kg		mg/Kg		mg/Kg	"
Date Sampled :		10/14/2003		10/15/2003		10/15/2003	3	10/15/2003	3	10/15/2003	3
Time Sampled :		14:00		10:30		11:00		11:20		15:00	-043
%Solids :	mg/Kg	76		88.5		76.3		29.7		86.2	
Dilution Factor :	Industrial	1 1		1		1	3.0	1	- 100	1.0	
ANALYTE	BOOK STANDARDS	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	1000000	26800		4570		474		896		775	The same
ANTIMONY	8200	1.9	J	1.2	J	15.7	U	40.4	U	0.93	J
ARSENIC	6100	0.77		41.2	57530	38.9	LESS	22.1	1	35.7	J
BARIUM	1000000	273	100	58.4	1	18.5		25.2		21.5	
BERYLLIUM	130	3.6		0.51	25 30	0.07		0.05		0.13	13-11-11
CADMIUM	10000	0.69	J	5.2		3.7	7 8	0.39	100	1.4	J
CALCIUM		193000		4630		7050	100	780	THE REAL	2700	
CHROMIUM		5.9		19.9	THE STATE OF	1.2		1.5		1.7	J
COBALT	1000000	3.1		3		0.67	SAGE!	0.46	9-0-1	0.77	
COPPER	820000	38		17		12.5		5.6		19.3	
IRON	1000000	8670		12700	K. A.	2890		800		1700	BLEY!
LEAD		21.7		177	J	314	J	63.3	J	167	
MAGNESIUM		41600		2350		168		313	R#371	500	
MANGANESE	470000	1900		230	J	17.8	J	6.3	J	60.3	
MERCURY	6100	0.13	U	0.4		0.61	45 2. 15	0.54	A SUL	0.070	J
NICKEL	410000	4.6	7 19	11.7		1.3	200	1.1		1.7	
POTASSIUM		3110		668		126	Mary 18	534	500	122	h42 1
SELENIUM	100000	9.2	U	9.6		18.1	10 944	20.3		18.0	J
SILVER	100000	0.32	J	0.18	J	0.11	J	0.25	J	2.3	U
SODIUM		1020		336		365		248		244	
THALLIUM	0	7.8		20.3		8.2		1.8	Andr	3.3	J
VANADIUM	140000	10.1		9		1.3		1.8	11 300	1.5	J
ZINC	1000000	48.6		254	J	248	J	38.5	J	155	J
CYANIDE	410000	3.7		6.3		17.4		12		11.0	

Table 8
RALs Exceeded by Waste Samples

Sample Number :	RAL	RAL	E0018		E0029		E0029DL		E0030		E0030DL		E0034	1	E0034DL	7	E0061		E0061DL	
Sampling Location :	11.61		X103		X301		X301		X302		X302		X303		X303		X304		X304	4.3
Matrix:	C. Carrie		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units:	ug/Kg	ug/Kg	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	3 1 1 1 1 1															7			1000	
Time Sampled :	200 E 1										100				its idea.	3				
%Moisture :			13		0		0		0		0		50	344	50		0		0	
pH:			6.5		6.5		6.5		6.8		6.8		3.5		3.5		2.0		2.0	
Dilution Factor :	Residential	Industrial	1.0		5.0		500.0		5.0		500.0		5.0		200.0		10.0		500.0	
Semivolatile Compound			Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
1,1'-BIPHENYL	39000000	100000000	380	U	170000		770000	J	310000		5000000	U	210000		3600000	U	540000		690000	J
2,4-DIMETHYLPHENOL	16000000	410000000	380	U	11000	J	5000000	U	48000	J	5000000	U	91000	U	3600000	U	48000	J	5000000	U
2.4-DINITROPHENOL	1600000	41000000	950	U		UJ	13000000	U	130000	UJ	13000000	U	230000	UJ	9100000	U	250000	U	13000000	U
2.4-DINITROTOLUENE	1600000	41000000	380	U	50000		5000000	U	50000	U	5000000	U	91000	U	3600000		100000		4300000	
2,6-DINITROTOLUENE	780000	20000000	380	U		u	5000000	U	50000	U	5000000	U	91000	U	4400000	100	100000	U	5000000	
2-CHLOROPHENOL	3900000	100000000	380	U	50000	UJ	5000000	ti	50000	U	5000000	U	91000	U	3600000	u	100000	U	5000000	
2-METHYLNAPHTHALENE	0000000	10000000	380	U	530000	00	3100000		1300000		1700000	J	790000		790000	1	2100000		3300000	
2-METHYLPHENOL	39000000	100000000	380	U	16000	J	5000000	11	33000	1	5000000	U	91000	U	3600000	U	43000	J	5000000	
4,6-DINITRO-2-METHYLPHENOL	0000000	100000000	950	U	130000	U	13000000	11	130000	U	13000000	U	16000	1	9100000	U	250000	U	13000000	
4-CHLORO-3-METHYLPHENOL			380	U	50000	UJ	5000000	U	50000	U	5000000	U	91000	U	3600000		100000	U	5000000	
4-METHYLPHENOL	3900000	100000000	380	U	50000	00	5000000	11	110000	U	5000000	U	91000	U	3600000	U	140000	-	5000000	
4-NITROPHENOL	48000000	100000000	950	UJ	130000	UJ	13000000	UJ	130000	U	13000000	-	230000	U	9100000		250000	UJ	13000000	
ACENAPHTHENE	47000000	1000000000	380	U	250000	03	870000	00	230000	U	5000000	U	290000	U	3600000	U		00	660000	
ACENAPHTHYLENE	47000000	100000000	380	U	1500000	J	4300000	,	510000		5000000	U	800000		630000	J	310000		1300000	
ACETOPHENONE	78000000	1000000000	380			U		J				U		,		-	650000			
ANTHRACENE	230000000	100000000	380	U	50000	U	5000000	U	130000		5000000	U	14000	J	3600000		190000		5000000	
BENZO(A)ANTHRACENE	88000	780000	110	U			5600000	-	2200000	-	3600000	J	2500000		2800000	J	3200000		5100000	_
BENZO(A)PYRENE		78000	1	J	2400000	100	5500000	1	1700000	The same	2700000	J	2600000		2800000	J	3200000		4800000	
BENZO(B)FLUORANTHENE	8800 88000	780000	120	J	1900000		4800000	J	1200000	180	2200000	J	1900000		2100000	J	2200000		3500000	
BENZO(G,H,I)PERYLENE	88000	780000	96	J	2200000		3900000	J	1200000	-	1900000	J	2200000		1900000	J	2300000	1000	3300000	
BENZO(K)FLUORANTHENE	870000	7800000		J	900000		2700000	J	540000		5000000	U	850000		3600000	U	1200000		1000000	
CARBAZOLE	3200000		150	U	1100000		2900000	J	960000		2100000	J	1500000		2000000	J	1600000		2900000	
CHRYSENE	8700000	29000000 78000000		U	1300000		3700000	J	460000		640000	J	450000		3600000	U	660000		920000	
DIBENZO(A,H)-ANTHRACENE	8800	78000	160	J	2800000 370000		6700000		1900000	-	3200000	J	2900000	-	3100000	J	3300000		5400000	
DIBENZOFURAN	3100000	82000000	380	U	960000		5000000 3800000	U	250000		5000000	U	450000	2000	3600000	U	450000	1	5000000	
DIMETHYLPHTHALATE	10000000000	100000000	380	U	50000	U	5000000	J	1200000	U	1700000 5000000	U	1500000	U	1400000	J	2300000		3400000	
FLUORANTHENE	310000000	820000000	200	1	8500000	U		U		U		U	91000	U	3600000	U	10000	U	1800000	
FLUORENE	31000000	82000000	380	U	1800000		19000000 7500000		5300000		8200000 3500000		8500000		8700000		12000000		16000000	
HEXACHLOROCYCLO-PENTADIENE	5500000	140000000	380	U	The second second second						7.000,000,000,000	J	3000000		3000000		4100000		6000000	
INDENO(1,2,3-CD)-PYRENE	88000	780000		100	50000	U	5000000	U	50000	U	5000000	U	91000	U	3600000	U	100000	UJ	5000000	
NAPHTHALENE	31000000		130	100000	1000000	THE OWNER, NAMED IN	2600000	J	740000		5000000	U	1300000	100	1100000	J	1200000	1000	1100000	
N-NITROSO-DI-N PROPYLAMINE		820000000	380	U	4200000	100	28000000		9600000		13000000		3100000		3500000	J	19000000		25000000	
PHENANTHRENE	9100	82000	380	U	50000	UJ	5000000	U	50000	U	5000000	U	91000	U	3600000	U	100000	U	5000000	
PHENOL	470000000	400000000	69	J	10000000		28000000		8000000		12000000		12000000		11000000		17000000		23000000	
PYRENE	470000000	100000000	380	U	60000		5000000	U	110000		5000000	U	91000	U	3600000	U	180000		5000000	U
FIRENC	610000	23000000	170	J	6100000	J	14000000		3500000		5400000		5400000		5500000		6500000		9600000	

Table 9
Volatile Analysis of Sediment Samples

Sample Number :	E0018		E0011		E0012		E0013		E0016		E0017		E0025DL	, .
Sampling Location :	X103		X201	10	X201 D		X202		X203		X204		X205	
Matrix :	Soil		Soil	Pal.	Soil		Soil	9	Soil	1114	Soil		Soil	
Units:	ug/Kg		ug/Kg											
Date Sampled :							18 m							
Time Sampled :							E							
%Moisture :	18		71		59		59		63	1 1	48		60	
pH:										× 53	Ph. I		K. 13	
Dilution Factor :	1.0		1.0		1.0		1.0	496	1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag										
DICHLORODIFLUOROMETHANE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
1.1.1-TRICHLOROETHANE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
1,1,2,2-TETRACHLOROETHANE	12	UJ	33	UJ	23	UJ	23	UJ	26	UJ	17	UJ	210	UJ
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
1,1,2-TRICHLOROETHANE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
1,1-DICHLOROETHANE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
1,1-DICHLOROETHENE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
1,2,4-TRICHLOROBENZENE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
1,2-DIBROMO-3-CHLOROPROPANE	12	UJ	33	UJ	23	UJ	23	UJ	26	UJ	17	UJ	210	UJ
1.2-DIBROMOETHANE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
1,2-DICHLOROBENZENE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
1,2-DICHLOROETHANE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
1,2-DICHLOROPROPANE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
1,3-DICHLOROBENZENE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
1,4-DICHLOROBENZENE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
2-BUTANONE	12	UJ	46	J	49	J	11	J	26	UJ	17	UJ	130	J
2-HEXANONE	12	UJ	33	UJ	23	UJ	23	UJ	26	UJ	17	UJ	210	UJ
4-METHYL-2-PENTANONE	12	UJ	33	UJ	23	UJ	23	UJ	26	UJ	17	UJ	210	UJ
ACETONE	12	UJ	170		210		33		26		5	J	500	
BENZENE	12	U	10	J	23	U	23	U	26	U	17	U	1600	
BROMODICHLOROMETHANE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
BROMOFORM	12	U	33	U	23	U	23	U	26	U	17	U	210	U
BROMOMETHANE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
CARBON DISULFIDE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
CARBON TETRACHLORIDE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
CHLOROBENZENE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
CHLOROETHANE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
CHLOROFORM	12	U	33	U	23	U	23	U	26	U	17	U	210	U
CHLOROMETHANE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
CIS-1,2-DICHLOROETHENE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
CIS-1,3-DICHLOROPROPENE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
CYCLOHEXANE	12	UJ	33	UJ	23	UJ	23	UJ	26	UJ	17	UJ	210	UJ
DIBROMOCHLOROMETHANE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
ETHYLBENZENE	12	U	33	U	23	U	23	U	26	U	17	U	1300	
ISOPROPYLBENZENE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
METHYL ACETATE	12	UJ	33	UJ	23	UJ	23	UJ	26	UJ	17	UJ	210	UJ
METHYL TERT-BUTYL ETHER	12	U	33	U	23	U	23	U	26	U	17	U	210	U
METHYLCYCLOHEXANE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
METHYLENE CHLORIDE	6	J	33	UJ	23	U	23	U	26	UJ	17	U	270	J
STYRENE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
TETRACHLOROETHENE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
TOLUENE	12	U	33	U	23	U	23	U	26	U	. 17	U	250	The same
TRANS-1,2-DICHLOROETHENE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
TRANS-1,3-DICHLOROPROPENE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
TRICHLOROETHENE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
TRICHLOROFLUOROMETHANE	12	U	33	UJ	23	UJ	23	UJ	26	UJ	17	UJ	210	UJ
VINYL CHLORIDE	12	U	33	U	23	U	23	U	26	U	17	U	210	U
XYLENES (TOTAL)	12	U	33	U	23	U	23	U	26	U	17	U	3300	

Table 9
Volatile Analysis of Sediment Samples

Sample Number :	E0018		E0027	7	E0036	MA.	E0037 X208		E0038 X209		E0039 X210		E0043 X211		E0044 X212
Sampling Location :	X103	177	X206		X207				Soil		Soil		Soil		Soil
Matrix :	Soil	100	Soil	15	Soil		Soil			4			ug/Kg		ug/Kg
Units:	ug/Kg	9.4	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Ng		ug/Ng
Date Sampled :									1399		Pertit of				
Time Sampled :	40		60		50		22		82		34		24		41
%Moisture :	18		62		59		23		02	4	34		24		41
pH:	140		4.0		10		10		1.0		1.0		1.0		1.0
Dilution Factor :	1.0	-	1.0	-	1.0	Flori	1.0	Class		Flor	_	Floor		Floa	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	
DICHLORODIFLUOROMETHANE	12	U	26	U	23	Ų	12	U	49	U	15	U	13	U	17
1,1,1-TRICHLOROETHANE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
1,1,2,2-TETRACHLOROETHANE	12	UJ	26	U	23	U	12	U	49	U	15	U	13	U	17
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
1,1,2-TRICHLOROETHANE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
1,1-DICHLOROETHANE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
1,1-DICHLOROETHENE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
1,2,4-TRICHLOROBENZENE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
1,2-DIBROMO-3-CHLOROPROPANE	12	UJ	26	U	23	UJ	12	UJ	49	U	15	UJ	13	UJ	17
1,2-DIBROMOETHANE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
1,2-DICHLOROBENZENE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
1,2-DICHLOROETHANE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
1,2-DICHLOROPROPANE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
1,3-DICHLOROBENZENE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
1,4-DICHLOROBENZENE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
2-BUTANONE	12	UJ	26	U	15	J	7	J	160		12	J	3	J	11
2-HEXANONE	12	UJ	26	U	23	U	12	U	49	U	15	U	13	U	17
4-METHYL-2-PENTANONE	12	UJ	26	U	23	U	12	U	49	U	15	U	13	U	17
ACETONE	12	UJ	26	U	62	J	24	J	510	J	58	J	14	J	44
BENZENE	12	U	26	UJ	23	U	9	J	49	U	15	U	13	U	17
BROMODICHLOROMETHANE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
BROMOFORM	12	U	26	U	23	UJ	12	UJ	49	U	15	UJ	13	UJ	17
BROMOMETHANE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
CARBON DISULFIDE	12	U	26	U	23	U	12	U	10	J	15	U	13	U	17
CARBON TETRACHLORIDE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
CHLOROBENZENE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
CHLOROETHANE	12	U	26	U	23	UJ	12	UJ	49	U	15	UJ	13	UJ	17
CHLOROFORM	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
CHLOROMETHANE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
CIS-1,2-DICHLOROETHENE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
CIS-1,3-DICHLOROPROPENE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
CYCLOHEXANE	12	UJ	26	U	23	U	12	U	49	U	15	U	13	U	17
DIBROMOCHLOROMETHANE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
ETHYLBENZENE	12	U	26	U	23	U	12	U	7	J	15	U	13	U	17
ISOPROPYLBENZENE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
METHYL ACETATE	12	UJ	5	J	23	U	12	U	49	U	15	U	13	U	17
METHYL TERT-BUTYL ETHER	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
METHYLCYCLOHEXANE	12	U	26	U	23	U	12	U	11	J	15	U	13	U	17
METHYLENE CHLORIDE	6	J	26	UJ	9	J	7	J	49	U	4	J	5	J	6
STYRENE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
TETRACHLOROETHENE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
TOLUENE	12	U	26	U	23	U	12	U	55		15	U	13	U	17
TRANS-1,2-DICHLOROETHENE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
TRANS-1,3-DICHLOROPROPENE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
TRICHLOROETHENE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
TRICHLOROFLUOROMETHANE	12	U	26	U	23	UJ	12	UJ	49	UJ	15	UJ	13	UJ	17
VINYL CHLORIDE	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17
XYLENES (TOTAL)	12	U	26	U	23	U	12	U	49	U	15	U	13	U	17

Table 9
Volatile Analysis of Sediment Samples

Sample Number :	E0018			E0045	T R	E0046	37.76	E0050		E0051	
Sampling Location :	X103			X212 D		X213		X214		X215	
Matrix :	Soil			Soil		Soil		Soil		Soil	
Units:	ug/Kg			ug/Kg		ug/Kg	71	ug/Kg		ug/Kg	
Date Sampled :				de maria		100		1 7			
Time Sampled :				Mr. IL		12.35					
%Moisture :	18			35		3		0		24	
pH:										1	
Dilution Factor :	1.0			1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
DICHLORODIFLUOROMETHANE	12	U	U	14	U	10	U	10	U	13	U
1,1,1-TRICHLOROETHANE	12	U	U	14	U	10	U	10	U	13	U
1,1,2,2-TETRACHLOROETHANE	12	UJ	U	14	U	10	U	10	U	13	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	12	U	U	14	U	10	U	10	U	13	U
1,1,2-TRICHLOROETHANE	12	U	U	14	U	10	U	10	U	13	U
1,1-DICHLOROETHANE	12	U	U	14	U	10	U	10	U	13	U
1,1-DICHLOROETHENE	12	U	U	14	U	10	U	10	U	13	UJ
1,2,4-TRICHLOROBENZENE	12	U	U	14	U	10	U	10	U	13	U
1,2-DIBROMO-3-CHLOROPROPANE	12	UJ	UJ	14	UJ	10	UJ	10	U	13	U
1,2-DIBROMOETHANE	12	U	U	14	U	10	U	10	U	13	U
1,2-DICHLOROBENZENE	12	U	U	14	U	10	U	10	U	13	U
1,2-DICHLOROETHANE	12	U	U	14	U	10	U	10	U	13	U
1,2-DICHLOROPROPANE	12	U	U	14	U	10	U	10	U	13	U
1,3-DICHLOROBENZENE	12	U	U	14	U	10	U	10	U	13	U
1,4-DICHLOROBENZENE	12	U	U	14	U	10	U	10	U	13	U
2-BUTANONE	12	UJ	J	21		4	J	13		8	J
2-HEXANONE	12	UJ	U	14	U	10	U	10	U	13	U
4-METHYL-2-PENTANONE	12	UJ	U	14	U	10	U	10	U	13	U
ACETONE	12	UJ	J	75	J	15	J	47	J	32	J
BENZENE	12	U	U	14	U	10	U	22		13	U
BROMODICHLOROMETHANE	12	U	U	14	U	10	U	10	U	13	U
BROMOFORM	12	U	UJ	14	UJ	10	UJ	10	U	13	U
BROMOMETHANE	12	U	U	14	U	10	U	10	U	13	U
CARBON DISULFIDE	12	U	U	14	U	10	U	10	U	13	U
CARBON TETRACHLORIDE	12	U	U	14	U	10	U	10	U	13	U
CHLOROBENZENE	12	U	U	14	U	10	U	10	U	13	U
CHLOROETHANE	12	U	UJ	14	UJ	10	UJ	10	U	13	U
CHLOROFORM	12	U	U	14	U	10	U	10	U	13	U
CHLOROMETHANE	12	U	U	14	U	10	U	10	U	13	U
CIS-1,2-DICHLOROETHENE	12	U	U	14	U	10	U	10	U	13	U
CIS-1,3-DICHLOROPROPENE	12	U	U	14	U	10	U	10	U	13	U
CYCLOHEXANE	12	UJ	U	14	U	10	U	10	U	13	U
DIBROMOCHLOROMETHANE	12	U	U	14	U	10	U	10	U	13	U
ETHYLBENZENE	12	U	U	14	U	10	U	10	U	13	U
ISOPROPYLBENZENE	12	U	U	14	U	10	U	10	U	13	U
METHYL ACETATE	12	UJ	U	14	U	10	U	10	U	13	U
METHYL TERT-BUTYL ETHER	12	U	U	14	U	10	U	10	U	13	U
METHYLCYCLOHEXANE	12	U	U	14	U	10	U	10	U.	13	U
METHYLENE CHLORIDE	6	J	J	7	J	10	U	10	U	13	UJ
STYRENE	12	U	U	14	U	10	U	10	U	13	U
TETRACHLOROETHENE	12	U	U	14	U	10	U	10	U	13	U
TOLUENE	12	U	U	14	U	10	U	2	J	13	U
TRANS-1,2-DICHLOROETHENE	12	U	U	14	U	10	U	10	U	13	U
TRANS-1,3-DICHLOROPROPENE	12	U	U	14	U	10	U	10	U	13	U
TRICHLOROETHENE	12	U	U	14	U	10	U	10	U	13	U
TRICHLOROFLUOROMETHANE	12	U	UJ	14	UJ	10	UJ	10	U	13	UJ
VINYL CHLORIDE	12	U	U	14	U	10	U	10	U	13	U
XYLENES (TOTAL)	12	U	U	14	U	10	U	10	U	13	U

Table 9
Volatile Analysis of Sediment Samples

Sample Number :	E0018		E0052	100	E0053	
Sampling Location :	X103		X216		X217	
Matrix:	Soil		Soil		Soil	
Units:	ug/Kg	,	ug/Kg		ug/Kg	
Date Sampled :		1			12	
Time Sampled :			27			
%Moisture :	18		0		0	
pH:						
Dilution Factor :	1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag
DICHLORODIFLUOROMETHANE	12	U	10	U	10	U
1.1.1-TRICHLOROETHANE	12	U	10	U	10	U
1,1,2,2-TETRACHLOROETHANE	12	UJ	10	U	10	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	12	U	10	U	10	U
	12	U	10	U	10	U
1,1,2-TRICHLOROETHANE	12	U	10	U	10	U
1,1-DICHLOROETHENE	12	U	10	U	10	U
1,1-DICHLOROETHENE				U	10	U
1,2,4-TRICHLOROBENZENE	12	U	10		10	
1,2-DIBROMO-3-CHLOROPROPANE	12	UJ	10	U		U
1,2-DIBROMOETHANE	12	U	10	U	10	U
1,2-DICHLOROBENZENE	12	U	10	U	10	U
1,2-DICHLOROETHANE	12	U	10	U	10	U
1,2-DICHLOROPROPANE	12	U	10	U	10	U
1,3-DICHLOROBENZENE	12	U	10	U	10	U
1,4-DICHLOROBENZENE	12	U	10	U	10	U
2-BUTANONE	12	UJ	10	U	12	
2-HEXANONE	12	UJ	10	U	10	U
4-METHYL-2-PENTANONE	12	UJ	10	U	10	U
ACETONE	12	UJ	17	UJ	45	J
BENZENE	12	U	10	UJ	22	
BROMODICHLOROMETHANE	12	U	10	U	10	U
BROMOFORM	12	U	10	U	10	U
BROMOMETHANE	12	U	10	U	10	U
CARBON DISULFIDE	12	U	10	U	10	U
CARBON TETRACHLORIDE	12	U	10	U	10	U
CHLOROBENZENE	12	U	10	U	10	U
CHLOROETHANE	12	U	10	U	10	U
CHLOROFORM	12	U	10	U	10	U
CHLOROMETHANE	12	U	10	U	10	U
CIS-1,2-DICHLOROETHENE	12	U	10	U	10	U
CIS-1,3-DICHLOROPROPENE	12	U	10	U	10	U
CYCLOHEXANE	12	UJ	10	U	10	U
DIBROMOCHLOROMETHANE	12	U	10	U	10	U
ETHYLBENZENE	12	U	10	U	10	U
ISOPROPYLBENZENE	12	U	10	U	10	U
METHYL ACETATE	12	UJ	10	U	10	U
METHYL TERT-BUTYL ETHER	12	U	10	U	10	U
METHYLCYCLOHEXANE	12	U	10	U	10	U
METHYLENE CHLORIDE	6	J	10	U	10	UJ
STYRENE	12		10	U	10	U
TETRACHLOROETHENE	12	U	10	U	10	U
TOLUENE	12		10	U	4	J
TRANS-1,2-DICHLOROETHENE	12	U	10	U	10	U
TRANS-1,3-DICHLOROPROPENE	12	U	10	U	10	U
TRICHLOROETHENE	12	U	10	U	10	U
TRICHLOROFLUOROMETHANE	12			U	10	U
VINYL CHLORIDE	12	U	10	U	10	U
THE STECKED	12	0	10	U	10	0

Table 10 Semi-Volatile Analysis of Sediment Samples

Canada Number	ECOAS		Quarry		Quarry		Quarry		Quarry		Depres E0017	31011	E0025		Tank F0025RE		E0027		Fraction Fraction		Fracti E0037
Sample Number :	E0018		E0011		E0012		E0013		E0016					_		-	-		X207		X208
Sampling Location :	X103		X201		X201 D	_	X202		X203		X204		X205		X205		X206	-	Soil		Soil
Matrix:	Soil		Soil		Soil		Soil	_	Soil		Soil		Soil		Soil	_	Soil		-		-
Units:	ug/Kg		ug/Kg	_	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	_	ug/Kg	_	ug/Kg		ug/Kg
Date Sampled :						_		-										_		_	-
Time Sampled :								_								_	40	_	- 50		000
%Moisture:	13		86		84	-	62	_	70		47		69		69	_	13	_	59		23
pH:	6.5	_	6.3		7.5		6.8		7.2		6.8		6.7		6.7		6.7		7.2	_	6.8
Dilution Factor:	1.0		1.0		1.0		1.0		1.0		1.0		1.0	_	1.0	_	1.0	-	1	-	1.0
Semivolatile Compound	Result	Flag	Result	Flag	_	Flag	_	Flag		Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag		Flag	
1,1'-BIPHENYL	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	U	11000	U	800	U	11
2,2'-OXYBIS(1- CHLOROPROPANE)	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	U	11000	U	800	U	43
2,4,5-TRICHLOROPHENOL	950	U	5900	U	5200	U	2200	U	2800	U	47000	U	81000	UJ	81000	U	29000	U	2000	U	110
2,4,6-TRICHLOROPHENOL	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	U	11000	U	800	U	43
2,4-DICHLOROPHENOL	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	U	11000	U	800	U	43
2,4-DIMETHYLPHENOL	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	U	11000	U	800	U	43
2,4-DINITROPHENOL	950	U	5900	U	5200	U	2200	U	2800	U	47000	UJ	81000	UJ	81000	UJ	29000	UJ	2000	U	110
2,4-DINITROTOLUENE	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	U	11000	U	800	U	43
2,6-DINITROTOLUENE	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	U	11000	U	800	U	43
2-CHLORONAPHTHALENE	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	U	11000	U	800	U	43
2-CHLOROPHENOL	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	U	11000	U	800	U	43
2-METHYLNAPHTHALENE	380	U	2400	U	2100	U	870	U	1100	U	19000	U	8300	J	8300	J	11000	U	1100		39
2-METHYLPHENOL	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	U	11000	U	800	U	43
2-NITROANILINE	950	U	5900	U	5200	U	2200	U	2800	U	47000	U	81000	UJ	81000	U	29000	U	2000	U	110
2-NITROPHENOL	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	U	11000	U	800	U	43
3,3'-DICHLOROBENZIDINE	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	U	32000	UJ	11000	U	800	U	43
3-NITROANILINE	950	U	5900	U	5200	U	2200	U	2800	U	47000	U	81000	UJ	81000	U	29000	U	2000	U	110
4,6-DINITRO-2-METHYLPHENOL	950	U	5900	U	5200	U	2200	U	2800	U	47000	UJ	81000	UJ	9900	J	29000	UJ	2000	U	110
4-BROMOPHENYL-PHENYLETHER	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	UJ	11000	U	800	U	43
4-CHLORO-3-METHYLPHENOL	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	U	11000	U	800	U	43
4-CHLOROANILINE	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	U	11000	U	800	U	43
4-CHLOROPHENYL-PHENYL ETHER	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	U	11000	U	800	U	43
4-METHYLPHENOL	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	U	11000	U	800	U	43
4-NITROANILINE	950	U	5900	U	5200	U	2200	U	2800	U	47000	U	81000	UJ	81000	U	29000	U	2000	U	110
4-NITROPHENOL	950	UJ	5900	UJ	5200	UJ	2200	UJ	2800	UJ	47000	UJ	81000	UJ	81000	UJ	29000	UJ	2000	U	110
ACENAPHTHENE	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	U	11000	U	800	U	35
ACENAPHTHYLENE	380	U	2400	U	2100	U	870	U	1100	U	20000	0	39000	J	32000		7800	J	2600		660
ACETOPHENONE	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	U	3600	J	620	J	1100
ANTHRACENE	380	U	2400	U	2100	U	870	U	1100	U	10000		11000	1	13000	J	2300	J	6300		7200
ATRAZINE	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	UJ	11000	U	800	U	43
BENZALDEHYDE	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	U	11000	U	190	J	13
BENZO(A)ANTHRACENE	110	J	2400	U	2100	U	870	U	1100	U	63000		21000	1	24000	1	1800		12000	F	2500
BENZO(A)PYRENE	120	I	2400	U	2100	U	870	U	1100	U	31000		22000	1	22000		11000	U	8300	E	1800
BENZO(B)FLUORANTHENE	120	1	2400	U	2100	U	88	J	1100	U	74000	1000	43000	,	47000	-	4100	1	11000	E	2500
BENZO(G,H,I)PERYLENE	96	1	2400	U	2100	U	870	U	1100	U	32000	No.	18000	1	11000	1	2200	1	4900	-	9300
BENZO(K)FLUORANTHENE	150	1	2400	U	2100	U	870	U	1100	U	54000	Sales II	30000	7	29000	3	2600	J	7400	E	1400
	380	U	2400	U	2100	U	_	U	1100	U		U		111	The same of the sa	U	11000	U	800	U	
BIS(2-CHLOROETHOXY)METHANE BIS-(2-CHLOROETHYL)ETHER	380	U	2400	U	-	U	870	U	-	-	19000	-	32000	UJ	32000	_	-	_	800	U	430
	380	U		U	2100	-	870	-	1100	U	19000	U	32000	UJ	32000	U	11000	U		-	_
BIS(2-ETHYLHEXYL)PHTHALATE BUTYLBENZYLPHTHALATE	380	U	2400	-	320	J	870	U	130	J	19000	UJ	32000	UJ	3400	111	11000	UJ	1100	В	43
	_	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	U		UJ	11000	U	800	U	43
CAPROLACTAM	380	-	490	J	2100	U	110	J	1100	U	19000	U	32000	UJ	32000	U	11000	U	800	U	43
CARBAZOLE	380	U	2400	U	2100	_	870	_	1100	U	19000	U	19000	J	18000	J	11000		380	J	92
CHRYSENE DIRENTO(A H) ANTURACENE	160 59	-	2400	U	2100	U	98	J	1100	U	95000	March 1	59000	17	59000	-	4500	J	14000	E	2900
DIBENZO(A,H)-ANTHRACENE		J	2400	U	2100	U	870	U	1100	U	6800		32000	U	32000	U	11000		2200		4300
DIBENZOFURAN DIETHYLPHTHALATE	380	U	2400	U	2100	U	870	_	1100	U	19000	-	7700	J	7700	J	11000	U	410	J	59
DIMETHYLPHTHALATE	380	U	2400	U	2100	U	870	U	1100	U	19000	_	32000		32000	U	11000	-	800	U	43
	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	U	11000	U	800	U	43
DI-N-BUTYLPHTHALATE DI-N-OCTYLPHTHALATE	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	UJ	11000	U	800	U	43
FLUORANTHENE	200	_	2400	U	2100	U	870	U	1100	U	19000	U	32000	U	32000	U	11000	U	800	U	43
FLUORENE	_	J	2400	U	2100	U	120	J	120	J	92000		140000	J	140000	J	3400	J	24000	E	4900
	380	U	2400	U	2100	U	870	U	1100	U	19000	U	35000	7	35000	-	11000	U	1300		180
HEXACHLOROBENZENE HEXACHLOROBUTADIENE	380	U	2400	U	2100	U	870		1100	U	19000		32000			UJ	11000		800	U	43
	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	U	11000	U	800	U	43
HEXACHLOROCYCLO-PENTADIENE	380	U	2400	U	2100	U	870	U	1100	U	19000	UJ	32000	UJ	32000	UJ		UJ	800	U	43
HEXACHLOROETHANE	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	U	11000	U	800	U	43
INDENO(1,2,3-CD)-PYRENE	130	J	2400	U	2100	U	870	U	1100	U	35000		20000	J	21000	J	11000	U	6500		1300
ISOPHORONE	380	U	2400	U	2100	U	870	U	2800		19000	U	32000	UJ	32000	U	11000	U	800	U	43
NAPHTHALENE	380	U	2400	U	2100	U	870	U		U	19000		89000	J	83000		4200	J	1000		120
NITROBENZENE	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	U	11000	_	800	U	43
N-NITROSO DIPHENYLAMINE	380	U	2400	U	2100	U	870	U	1100	U	19000		32000	UJ	32000	UJ	11000	U	800	U	43
N-NITROSO-DI-N PROPYLAMINE	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	U	11000	U	800	U	43
PENTACHLOROPHENOL	950	U	5900	U	5200	U	2200	U	2800	U	47000	U	81000	UJ	81000	UJ	29000	U	2000	U	110
			0400	U	2100	U	870	U	1100	U	24000	1000	110000	1	110000	1	1700	1	12000	E	1900
PHENANTHRENE	69	J	2400	U	2100	0	010	0	1100	0	24000		110000	J	110000	3		3	12000		1000
PHENANTHRENE PHENOL	380	U	2400	U	2100	U	870	U	1100	U	19000	U	32000	UJ	32000	U	11000	U	800	U	43

Table 10 Semi-Volatile Analysis of Sediment Samples

			n	Fraction		Fractio	n	Fractio	n	Fractio	n	Fractio	n	Fraction	1	Fractio	n	1&M		1&M	
Sample Number :	E0018			E0037DL		E0038		E0039		E0043		E0044		E0045		E0046		E0050		E0051	
Sampling Location :	X103			X208		X209		X210		X211		X212		X212 D		X213		X214		X215	
Matrix:	Soil			Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units:	ug/Kg			ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :																					
Time Sampled:						1															
%Moisture :	13			23		82		34		16		39		37		11		25		24	_
pH:	6.5			6.8		6.5		6.5		6.7		6.3		6.5		6.7		7.2		6.5	_
Dilution Factor :	1.0			50.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	_
Semivolatile Compound	Result	Flag	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
1,1'-BIPHENYL	380	U	J	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	180	J
2,2'-OXYBIS(1- CHLOROPROPANE)	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
2,4,5-TRICHLOROPHENOL	950	U	U	54000	U	4600	U	1300	U	990	U	1400	U	1300	UJ	930	U	1100	U	1100	U
2,4,6-TRICHLOROPHENOL	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
2,4-DICHLOROPHENOL	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
2,4-DIMETHYLPHENOL	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
2,4-DINITROPHENOL	950	U	UJ	54000	U	4600	UJ	1300	UJ	990	U	1400	UJ	1300	UJ	930	UJ	1100	UJ	1100	UJ
2,4-DINITROTOLUENE	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	UJ	430	UJ
2,6-DINITROTOLUENE	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
2-CHLORONAPHTHALENE	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
2-CHLOROPHENOL	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
2-METHYLNAPHTHALENE	380	U	J	21000	U	3700		89	J	390	U	540	U	520	UJ	370	U	440	U	230	J
2-METHYLPHENOL	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
2-NITROANILINE	950	U	U	54000	U	4600	U	1300	U	990	U	1400	U	1300	UJ	930	U	1100	U	1100	U
2-NITROPHENOL	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
3,3'-DICHLOROBENZIDINE	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
3-NITROANILINE	950	U	U	54000	U	4600	U	1300	U	990	U	1400	U	1300	UJ	930	U	1100	U	1100	U
4,6-DINITRO-2-METHYLPHENOL	950	U	U	54000	U	4600	U	1300	U	990	U	1400	U	1300	UJ	930	U	1100	U	1100	U
4-BROMOPHENYL-PHENYLETHER	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
4-CHLORO-3-METHYLPHENOL	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
4-CHLOROANILINE	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
4-CHLOROPHENYL-PHENYL ETHER	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
4-METHYLPHENOL	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
4-NITROANILINE	950	U	U	54000	U	4600	U	1300	U	990	U	1400	U	1300	UJ	930	U	1100	U	1100	U
4-NITROPHENOL	950	UJ	U	54000	UJ	4600	U	1300	U	990	UJ	1400	U	1300	UJ	930	U	1100	UJ	1100	U
ACENAPHTHENE	380	U	J	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	250	J
ACENAPHTHYLENE	380	U	100	4100	J	290	J	52	J	390	U	56	J	70	J	38	J	84	J	250	J
ACETOPHENONE	380	U		21000	U	220	J	500	U	390	U	87	J	79	J	45	J	60	J	46 350	J
ANTHRACENE ATRAZINE	380	U	U	21000	11	710	U	65 500	U	390	U	540	U	520 520	UJ	38	J	87 440	U	430	U
BENZALDEHYDE	380	U	1	21000	U	1800	U	500	U	390	U	78	J	520	UJ	370	U	83	1	51	-
BENZO(A)ANTHRACENE	110	1	3	21000	0	2100	0	220	J	390	U	160	J	220	J	130	J	350	J	1300	3
BENZO(A)PYRENE	120	J		17000		1600		230	J	390	U	190	1	250	J	150	J	370	1	1600	
BENZO(B)FLUORANTHENE	120	J		19000	1	1200	J	230	7	390	U	180	J	260	J	140	J	410	J	970	
BENZO(G,H,I)PERYLENE	96	1		11000	1	1400	J	150	1	390	U	110	J	200	J	110	J	370	J	1100	
BENZO(K)FLUORANTHENE	150	J		19000	J	570	J	140	J	390	U	150	J	230	J	130	J	370	7	1000	
BIS(2-CHLOROETHOXY)METHANE	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
BIS-(2-CHLOROETHYL)ETHER	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
BIS(2-ETHYLHEXYL)PHTHALATE	380	U	U	21000	U	2800	0	87	1	390	U	370	J	170	1	370	UJ	440	U	430	UJ
BUTYLBENZYLPHTHALATE	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
CAPROLACTAM	380	U	U	21000	-	_	U	-	U	390	U	540	U	520	UJ	- Marie and Address of the Lot of	U	440	U	430	U
CARBAZOLE	380	U	-	21000	-	1800		500	U	390	U	540	U	520	UJ	370		440	U	430	-
CHRYSENE	160	J	10000	24000	No.	3600		320	J	390	U	210	J	300	J	190	J	560		1500	Ť
DIBENZO(A,H)-ANTHRACENE	59	J		2400	J	440	J	500	U	390	U	540	U	520	UJ	Committee of the last of the l	U	100	J	120	J
DIBENZOFURAN	380	U		21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	74	J
DIETHYLPHTHALATE	380	U	U	21000	-	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
DIMETHYLPHTHALATE	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
DI-N-BUTYLPHTHALATE	380	U	U	21000	_	1800	U	500	U	390	U	540	U	520	UJ	51	J	440	U	430	U
DI-N-OCTYLPHTHALATE	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
FLUORANTHENE	200	J	E SE	42000		1100	J	320	J	390	U	260	J	380	J	230	J	760		1400	
FLUORENE	380	U		21000	U	260	J	500	U	390	U	540	U	520	UJ	370	U	440	U	200	J
HEXACHLOROBENZENE	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
HEXACHLOROBUTADIENE	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
HEXACHLOROCYCLO-PENTADIENE	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
HEXACHLOROETHANE	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
INDENO(1,2,3-CD)-PYRENE	130	J		12000	J	780	J	170	J	390	U	160	J	170	J	88	J	300	J	930	
ISOPHORONE	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
NAPHTHALENE	380	U		21000	U	1500	J	66	J	390	U	540	U	520	UJ	370	U	440	U	740	
NITROBENZENE	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
N-NITROSO DIPHENYLAMINE	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
N-NITROSO-DI-N PROPYLAMINE	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
PENTACHLOROPHENOL	950	U	U	54000	U	4600	U	1300	U	990	U	1400	U	1300	UJ	_	U	1100	U	1100	U
PHENANTHRENE	69	J		16000	J	4700	1000	310	J	390	U	160	J	220	J	160	J	290	J	1200	
PHENOL	380	U	U	21000	U	1800	U	500	U	390	U	540	U	520	UJ	370	U	440	U	430	U
TTILINOL	000	-	-	21000	-	1000	0	500	0	000	-	010	-	020		010	0	440	0	400	-

Table 10 Semi-Volatile Analysis of Sediment Samples

Sample Number :	E0018	Seed 2	E0052		E0053		E0053DL	
Sampling Location :	X103		X216		X217		X217	
Matrix:	Soil		Soil		Soil		Soil	
Units:	ug/Kg		ug/Kg	100	ug/Kg	30	ug/Kg	
Date Sampled :					40 30			
Time Sampled :								
%Moisture :	13		27		42		42	
pH:	6.5		6.8		7.1		7.1	
Dilution Factor:	1.0		1.0		1.0		2.0	
Semivolatile Compound	Result	Flag	Result	and Charles Street	Result	_	Result	Fla
1,1'-BIPHENYL	380	U	450	U	570	U	1100	U
2,2'-OXYBIS(1- CHLOROPROPANE)	380	U	450	U	570	U	1100	U
2,4,5-TRICHLOROPHENOL	950	U	1100	U	1400	U	2900	U
2,4,6-TRICHLOROPHENOL	380	U	450	U	570	U	1100	U
2,4-DICHLOROPHENOL	380	U	450	Ų	570	U	1100	U
2,4-DIMETHYLPHENOL	380	U	450	U	570	U	1100	U
2,4-DINITROPHENOL	950	U	1100	U	1400	U	2900	U
2,4-DINITROTOLUENE	380	U	450	U	570	U	1100	U
2,6-DINITROTOLUENE	380	U	450	U	570	U	1100	U
2-CHLORONAPHTHALENE	380	U	450	U	570	U	1100	U
2-CHLOROPHENOL	380	U	450	U	570	U	1100	U
2-METHYLNAPHTHALENE	380	U	450	U	120	J	1100	U
2-METHYLPHENOL	380	U	450 1100	U	570 1400	U	1100 2900	U
2-NITROANILINE 2-NITROPHENOL	950 380	U	450	U	570	U	1100	U
3,3'-DICHLOROBENZIDINE	380	U	450	U	570	U	1100	U
3-NITROANILINE	950	U	1100	U	1400	U	2900	U
4,6-DINITRO-2-METHYLPHENOL	950	U	1100	U	1400	U	2900	U
4-BROMOPHENYL-PHENYLETHER	380	U	450	U	570	U	1100	U
4-CHLORO-3-METHYLPHENOL	380	U	450	U	570	U	1100	U
4-CHLOROANILINE	380	U	450	U	570	U	1100	U
4-CHLOROPHENYL-PHENYL ETHER	380	U	450	U	570	U	1100	U
4-METHYLPHENOL	380	U	450	U	570	U	1100	U
4-NITROANILINE	950	U	1100	U	1400	U	2900	U
4-NITROPHENOL	950	UJ	1100	UJ	1400	UJ	2900	UJ
ACENAPHTHENE	380	U	450	U	250	J	240	J
ACENAPHTHYLENE	380	U	450	U	570	U	1100	U
ACETOPHENONE	380	U	450	U	570	U	1100	U
ANTHRACENE	380	U	450	U	960		980	J
ATRAZINE	380	U	450	U	570	U	1100	U
BENZALDEHYDE	380	U	450	U	65	J	1100	U
BENZO(A)ANTHRACENE	110	J	120	J	1800		1800	
BENZO(A)PYRENE	120	J	180	J	1800		1900	
BENZO(B)FLUORANTHENE	120	J	130	J	1700		1700	
BENZO(G,H,I)PERYLENE	96	J	170	J	1400		1400	33
BENZO(K)FLUORANTHENE	150	J	51	J	1300		1400	
BIS(2-CHLOROETHOXY)METHANE	380	U	450	U	570	U	1100	U
BIS-(2-CHLOROETHYL)ETHER	380	U	450	U	570	U	1100	U
BIS(2-ETHYLHEXYL)PHTHALATE	380	Ų	450	U	170	J	1100	U
BUTYLBENZYLPHTHALATE	380	U	450	U	570	U	1100	U
CAPROLACTAM	380	U	450	_	570	-	1100	-
CHRYSENE	380	U	450		210	J	210	j
CHRYSENE DIBENZO(A,H)-ANTHRACENE	160	J	170	J	2200	1	2200	11
DIBENZOFURAN	59 380	J	450 450	U	140 93	J	1100	U
DIETHYLPHTHALATE	380	U	450	U	570		1100	_
DIMETHYLPHTHALATE	380	U	450	U	570	U	1100	U
DI-N-BUTYLPHTHALATE	380	U	450	U	570		1100	U
DI-N-OCTYLPHTHALATE	380	U	450	U	570	U	1100	U
FLUORANTHENE	200	J	200	J	5300	700	5400	
FLUORENE	380	U	450	U	310	J	330	J
HEXACHLOROBENZENE	380	U	450	U	570	U	1100	U
HEXACHLOROBUTADIENE	380	U	450	U	570	U	1100	U
HEXACHLOROCYCLO-PENTADIENE	380	U	450	U	570	UJ	1100	UJ
HEXACHLOROETHANE	380	U	450	U	570	U	1100	U
INDENO(1,2,3-CD)-PYRENE	130	J	95	J	1100		1200	
ISOPHORONE	380	U	450	U	570	U	1100	U
NAPHTHALENE	380	U	450	U	72	J	1100	U
NITROBENZENE	380	U	450	U	570	U	1100	U
N-NITROSO DIPHENYLAMINE	380	U	450	U	570	-	1100	_
N-NITROSO-DI-N PROPYLAMINE	380	U	450	U	570	U	1100	U
PENTACHLOROPHENOL	950	U	1100	U	1400	U		U
PHENANTHRENE	69	J	98	J	3800	LE	4000	
PHENOL	380	U	450	U	570		1100	

Table 11 Inorganic Analysis of Sediment Samples

Background ME0027D Sample Number ME0018 ME0011 ME0013 ME0016 ME0017 ME0025 ME0027 X201 X201 D X202 X203 X204 X205 X206 X206 Sampling Location : X103 Matrix: Soil Soil Soil Soil Soil Soil Soil Soil Soil Units: mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg 10/15/2003 Date Sampled : 10/14/2003 10/14/2003 10/14/2003 10/14/2003 10/14/2003 10/14/2003 10/14/2003 10/15/2003 10:00 Time Sampled : 14:00 12:00 12:00 12:50 13:30 14:50 15:30 10:00 %Solids 76.0 11.0 15.0 33.6 29.3 48.7 32.9 76.8 78.6 1.0 1.0 Dilution Factor 1.0 1.0 1.0 1.0 1.0 1.0 1.0 Result ANALYTE Result Result Result Flag Result Result Flag Result Flag Result Flag Result Flag ALUMINUM 19400 6400 4850 4690 26800 15800 19500 4060 ANTIMONY 109 36.5 ARSENIC 17.0 0.77 BARIUM 139 138 399 65.7 139 139 273 154 117 1.1 BERYLLIUM 3.6 0.67 0.89 1.0 0.91 0.33 1.1 0.64 CADMIUM 1.4 0.24 0.95 15.1 19.0 0.69 1.3 1.6 1.5 CALCIUM 193000 61600 50700 63600 43100 6260 8790 5930 5570 CHROMIUM 10.4 5.9 4.2 13.8 11.0 COBALT 3.1 9.2 9.1 1.6 4.9 4.9 5.1 34.0 64.5 COPPER 38.0 61.9 62.5 46.5 48.6 67.6 64.6 IRON 8670 26100 25700 9430 14600 21800 19000 LEAD 21.7 45.9 47.0 55.2 75.9 MAGNESIUM 41600 12000 13700 8310 11100 1480 4240 1050 822 MANGANESE 1900 456 438 46.5 176 449 313 MERCURY 0.51 0.13 0.27 0.17 0.20 0.38 0.22 4.2 NICKEL 11.3 12.2 POTASSIUM 3110 3660 4730 4420 4380 1460 1700 798 719 SELENIUM 9.2 63.6 46.7 20.8 23.9 23.4 21.3 U 2.0 3.4 SILVER 0.32 18.2 U 13.3 U 6.0 6.8 0.18 6.1 0.19 0.12 SODIUM 1020 742 247 335 607 325 227 293 492 THALLIUM 7.8 4.8 5.8 4.7 4.4 6.2 1.3 3.9 4.3 VANADIUM 10.1 15.2 16.3 15.3 ZINC 48.6 126 145 127 19.5 99.8 162 CYANIDE 0.42 8.6 8.4

DISCLAIMER: This package has been electronically assessed as an added service to our customer. It has not been either validated or approved by Region 5 and any subsequent use by the data user is strictly at the risk of the data user. Region 5 assumes no responsibility for use of unvalidated data.

Table 11 Inorganic Analysis of Sediment Samples

				d

Sample Number :	ME0018		ME0027S		ME0036		ME0037		ME0038		ME0039	114	ME0043		ME0044		me0046		ME0050		ME0051		ME0052 X216		ME0053 X217	
Sampling Location :	X103		X206		X207		X208		X209		X210		X211		X212		x213		X214		X215					
Matrix:	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units:	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	10/14/2003		10/15/2003		10/15/2003		10/15/2003		10/15/2003		10/15/2003		10/15/2003		10/15/2003		10/15/2003		10/16/2003		10/16/2003		10/16/2003		10/16/2003	
Time Sampled:	14:00		10:00		12:50		13:00		13:20		13:40		14:30		14:50		16:00		9:00		9:20		10:00		10:30	
%Solids:	76.0		76.8		28.0		63.6		18.4		61.8		71.3		53.9		72.2	2	76.2		68.2	2	60.1		65	5
Dilution Factor:	1.0		1.0	Fort	1.0		1.0		1.0		1.0		1		1		1		1				1		1	_
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag		Fl
ALUMINUM	26800		5130		32700		12000		15600		11800		7180		13700		7300		7580		16700		6450		5090)
ANTIMONY	1.9	J	10.4		3.8	J	1.1	J	6.1	J	19.4	U	16.8	U	22.3	U	3.9	J	2.5	J	2.7	J	1.5	J	18.5	5 R
ARSENIC	0.77	1 3	26.1	1278	24.2	Nac.	9.1	400	16.3	U	4.9		2		1.1		3.7		4.1		4.4		4.5	J	3.7	1
BARIUM	273		658		207		95.3		208		83.0		45.5		87.6		58.6		77.7		86.1		77.1		48	8
BERYLLIUM	3.6		13.7		1.6		0.64		0.77		0.75		0.47		0.77		1		0.94		1.1		0.45		0.37	7
CADMIUM	0.69	J	27.7		4.8		1.3		3.8		2.4		0.73		1.1		1.3		1.4		2.1		1.4	J	0.83	3 1
CALCIUM	193000	-36	5550		62600		52500		49200	-	51100		53400		29200		81500		39800		35700		43900		49100	0
CHROMIUM	5.9		60.8	1000	111	15.9	16.5		84.7	1112	18.3	413	11.1		21.6	100	17.2		20.1		25.2	100	33.6	J	16.3	3 J
COBALT	3.1		132		16.9		9.9	A STATE OF	8.4		6.7		3.4		5.7		5.1		6.4	100	9.7		6.2		5	5
COPPER	38.0		123	AL.	115		234		309	1000	30.0		21.5		41.6		36.9		52.9		40		46.7		36.5	5
IRON	8670		17400		50300		21400		24200		18700		11600		15600		24400		19000		19300		14300		12300	0
LEAD	21.7	-	125	150	401	J	50.8	J	311	J	45.2	J	22.9	J	51.6	J	47	J	87.2	J	124	J	108		51.9	
MAGNESIUM	41600		914		36400		30800		16700		30200		32100		17100		38000		22100		24300		21100		21600	0
MANGANESE	1900		376	100	278	J	426	J	308	J	241	J	145		122		556		247		183		270	100	329	9
MERCURY	0.13	U	4.4	200	0.92		0.16	100	0.80	220	0.070		0.14	U	0.19		0.2		0.37	1000	0.91	100	0.31	J	0.15	5 J
NICKEL	4.6	1	138		47.2		20.1	THE	34.9	100	18.1		10.2		20.1	1000	14.4	1000	18.2		26.9	1 33	17.6		12	
POTASSIUM	3110		679		4270		2990		3780		2780		1750		2770		1640		1800		3920		1430		1290	
SELENIUM	9.2	U	13.5	100	11.4		2.8		38.0	_	2.3		1.7		1.9		2.8		2.1		2.4		11.6			8 R
SILVER	0.32	J	11.9	100	0.71	J	0.10	J	2.9	J	0.16	J	2.8	U	3.7	U	0.1	J	0.14	J	0.46	J	0.34		0.33	
SODIUM	1020		370		682		262		1250		612		190		204		395		281		277		321	_	320	_
THALLIUM	7.8	-	15.7		6.0	100	3.2		2.2		2.5		0.94		1.3		2.3		1.6		1.6		1.9		2.1	
VANADIUM	10.1		145		57.9	1350	24.5		30.7		26.1		16.9		23.3		18.1		17.9		30.7	THE REAL PROPERTY.	16.3	_	13.7	
ZINC	48.6	137	325		342	J	102	J	402	1	450	1000	50.3	1	116	1	101	l.	170	1	151		140		80.2	
CYANIDE	3.7	100	15.4	II SE	1.3		0.28		0.95		0.31		0.28		0.58	1	4.8	ľ	0.15	1	0.58	ľ	3.2	_	0.31	

DISCLAIMER: This package has been electro validated or approved by Region 5 and any sul Region 5 assumes no responsibility for use of Table 12
Volatile Analysis of Surface Water Sample

Sample Number :	E0009		E0010		E0014		E0019		E0020		E0026		E0028	E0035			
Sample Number :	S201		S201 D	FY	S202	183	S203	* 13	S204		S205	THE S	TRIP BLANK	FB1			
Sampling Location :	Water			100	Water		Water		Water		Water		Water	Water			
Matrix:			Water ug/L		ug/L	- 11	ug/L		ug/L		ug/L		ug/L	ug/L			
Units:	ug/L	ug/L			ug/L		ug/L		ug/L		ug/L	47	ug/L	-10-13	ug/L		
Date Sampled :			100				1.1				125 L						
ime Sampled : 'Moisture :	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		
pH:	IWA		IWA		INA		IVA		IVA	4	IWA		140		107		
Dilution Factor :	1.0		1.0	-	1.0		1.0		1.0		1.0	7	1.0		1.0		
Volatile Compound	Result	Flag		Flag	Result	Flag		Flag	Result	Flag	_	Flag		Result	FI		
DICHLORODIFLUOROMETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	
CHLOROMETHANE	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	U	
VINYL CHLORIDE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	
BROMOMETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	L	
CHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	L	
TRICHLOROFLUOROMETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	
1,1-DICHLOROETHENE	10	U	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHAN		U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	
ACETONE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	L	
CARBON DISULFIDE	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	i	
METHYL ACETATE	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	L	
METHYLENE CHLORIDE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	l	
TRANS-1,2-DICHLOROETHENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	
METHYL TERT-BUTYL ETHER	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	li	
1.1-DICHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	L	
CIS-1,2-DICHLOROETHENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	l	
2-BUTANONE	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	i	
CHLOROFORM	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	l	
1.1.1-TRICHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	
CYCLOHEXANE	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	l	
CARBON TETRACHLORIDE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	
BENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	lu	
1,2-DICHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	L	
TRICHLOROETHENE	10	U	10	U	10	U	10	U	3	J	10	U	10	U	10	ι	
METHYLCYCLOHEXANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	l	
1,2-DICHLOROPROPANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	l	
ROMODICHLOROMETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	
CIS-1,3-DICHLOROPROPENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	l	
4-METHYL-2-PENTANONE	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	L	
TOLUENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	ı	
TRANS-1,3-DICHLOROPROPENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	L	
1,1,2-TRICHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	l	
TETRACHLOROETHENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	L	
2-HEXANONE	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	L	
DIBROMOCHLOROMETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	L	
1,2-DIBROMOETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	L	
CHLOROBENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	L	
ETHYLBENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	L	
XYLENES (TOTAL)	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	ι	
STYRENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	L	
BROMOFORM	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	ι	
SOPROPYLBENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	L	
1,1,2,2-TETRACHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	
1,3-DICHLOROBENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	l	
1,4-DICHLOROBENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	L	
1,2-DICHLOROBENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	L	
1,2-DIBROMO-3-CHLOROPROPANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	
1,2,4-TRICHLOROBENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	L	

Table 13
Semi-Volatile Analysis of Surface Water Samples

Sample Number :	E0009	1000		E0010		E0014			E0020		E0026		E0035		SBLK6N			
Sampling Location:	S201		S201 D		S202		S203		S204		S205		FB1					
Matrix:	Water		Water		Water		Water		Water		Water		Water		Water			
Units:	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L			
Date Sampled :							100											
Time Sampled :	AU/A		NUA.		NI/A		NI/A		NIA		NI/A		N/A		NIA			
%Moisture : pH :	N/A 6.8		N/A 7.0		N/A 7.3		N/A 6.5		N/A 7.2		N/A 7.1		6.9		N/A			
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0		7.2 1.0			
Semivolatile Compound	Result	Flag		Flag				Flag		Flag		Flag	Result	Flag	Result	Flag		
BENZALDEHYDE	10	U	10	U	10	U	10	U	10	U	5	J	10	U	10	U		
PHENOL	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
BIS-(2-CHLOROETHYL)ETHER	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
2-CHLOROPHENOL	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
2-METHYLPHENOL	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
2,2'-OXYBIS(1- CHLOROPROPANE)		U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
ACETOPHENONE 4-METHYLPHENOL	10	U	10	U	10	U	10	U	3 10	J	7 10	U	10	U	10	U		
N-NITROSO-DI-N PROPYLAMINE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
HEXACHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
NITROBENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	u		
ISOPHORONE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
2-NITROPHENOL	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
2,4-DIMETHYLPHENOL	10	UJ	10	UJ	10	UJ	10	U	10	UJ	10	U	10	UJ	10	UJ		
BIS(2-CHLOROETHOXY)METHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
2,4-DICHLOROPHENOL	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
NAPHTHALENE 4 CHI OPOANII INE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
4-CHLOROANILINE HEXACHLOROBUTADIENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
CAPROLACTAM	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
4-CHLORO-3-METHYLPHENOL	10	U	10	u	10	U	10	U	10	U	10	U	10	U	10	U		
2-METHYLNAPHTHALENE	10	U	10	U	10	U	10	U	10	U	5	J	10	U	10	U		
HEXACHLOROCYCLO-PENTADIEN	10	UJ	10	UJ	10	UJ	10	U	10	UJ	10	U	10	UJ	10	UJ		
2,4,6-TRICHLOROPHENOL	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
2,4,5-TRICHLOROPHENOL	25	U	25	U	25	U	25	U	25	U	25	U	25	U	25	U		
1,1'-BIPHENYL	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
2-CHLORONAPHTHALENE 2-NITROANILINE	10	U	10 25	U	10	U	10	U	10	U	10	U	10	U	10	U		
DIMETHYLPHTHALATE	10	U	10	U	25 10	U	25	U	25	U	10	U	25	U	25 10	U		
2,6-DINITROTOLUENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
ACENAPHTHYLENE	10	U	10	U	10	U	10	U	10	U	2	J	10	U	10	U		
3-NITROANILINE	25	U	25	U	25	U	25	U	25	U	25	U	25	U	25	U		
ACENAPHTHENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
2,4-DINITROPHENOL	25	UJ	25	UJ	25	UJ	25	UJ	25	UJ	25	UJ	25	UJ	25	UJ		
4-NITROPHENOL DIBENZOFURAN	25	U	25	U	25	U	25	U	25	U	25	U	25	U	25	U		
2,4-DINITROTOLUENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
DIETHYLPHTHALATE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
FLUORENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
4-CHLOROPHENYL-PHENYL ETHER	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
4-NITROANILINE	25	U	25	U	25	U	25	U	25	U	25	U	25	U	25	U		
4,6-DINITRO-2-METHYLPHENOL	25	U	25	U	25	U	25	UJ	25	U	25	UJ	25	U	25	U		
N-NITROSO DIPHENYLAMINE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
4-BROMOPHENYL-PHENYLETHER HEXACHLOROBENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
ATRAZINE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
PENTACHLOROPHENOL	25	U	25	U	25	U	25	UJ	25	U	25	UJ	25	U	25	U		
PHENANTHRENE	10	U	10	U	10	U	10	U	2	J	10	U	10	U	10	U		
ANTHRACENE	10	U	10	U	10	U	10	U	3	J	4	J	10	U	10	U		
CARBAZOLE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
DI-N-BUTYLPHTHALATE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
PYRENE PYRENE	10	U	10	U	10	U	10	U	7	J	10	U	10	U	10	U		
BUTYLBENZYLPHTHALATE	10	U	10	U	10	U	10	U	10	n 1	10	U	10	U	10	U		
3,3'-DICHLOROBENZIDINE	10	U	10	U	10	U	10	U	10	C	10	U	10	0	10	U		
BENZO(A)ANTHRACENE	10	U	10	U	10	U	10	U	5	J	10	U	10	U	10	U		
CHRYSENE	10	U	10	U	10	U	10	U	9	J	10	U	10	U	10	U		
BIS(2-ETHYLHEXYL)PHTHALATE	10	U	2	J	1	J	10	U	19	W.	37		10	U	10	U		
DI-N-OCTYLPHTHALATE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
BENZO(B)FLUORANTHENE	10	U	10	U	10	U	10	U	5	J	10	U	10	U	10	U		
BENZO(K)FLUORANTHENE	10	U	10	U	10	U	10	U	3	J	10	U	10	U	10	U		
BENZO(A)PYRENE INDENO(1.2.3-CD)-PYRENE	10	U	10	U	10	U	10	U	2	J	10	U	10	U	10	U		
INDENO(1,2,3-CD)-PYRENE DIBENZO(A,H)-ANTHRACENE	10	U	10	U	10	U	10	U	10	J	10	U	10	U	10	U		
BENZO(G,H,I)PERYLENE	10	U	10	U	10	U	10	U	2	J	10	U	10	U	10	U		
		OR CHILD		120	10	_	10	-	4	~	10	~	10	~	10	U		

Table 14
Inorganic Analysis of Surface Water Samples

Sample Number :	SCDM Values	ME0009		ME0010		ME0014		ME0019		ME0020		ME0026		ME0019D		ME0019S		
Sampling Location :	Surface Water	S201		S201 D		S202		S203	J.	S204		S205		S203		S203		
Matrix:	Environmental	Water		Water	4 2	Water		Water										
Units:	Benchmark	ug/L		ug/L	4.5	ug/L		ug/L										
Date Sampled :	ppb	10/14/2003		10/14/2003		10/14/2003		10/14/2003		10/14/2003		10/14/2003	1	10/14/2003		10/14/2003		
Time Sampled :		12:00		12:00		12:50		14:00		14:50		15:30		14:00		14:00		
%Solids :		0.0		0.0		0.0		0.0		0.0	2.11	0.0		0.0		0.0		
Dilution Factor :		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		
ANALYTE		Result	Flag	Result	Flag	Result	Flag	Result	Flag									
ALUMINUM		77300		49.8		509		78.1		9250		51.5		72.3		1990		
ANTIMONY		60.0	U	60.0	U	60.0	U	109										
ARSENIC	340	47.5		3.0		15.0	U	15.0	U	17.0		15.0	U	15.0	U	45.8		
BARIUM		831		85.5		75.1		35.2	183	392		20.5		35.2		2080		
BERYLLIUM		3.9		5.0	U	5.0	U	0.050		3.0		5.0	U	5.0	U	50.6		
CADMIUM	2	10.8		5.0	U	5.0	U	5.0	U	2.6		5.0	U	5.0	U	52.2	100	
CALCIUM		449000		48100		70900		62000		273000		38400		62200		62100		
CHROMIUM		139		10.0	U	10.0	U	10.0	U	4.5		10.0	U	10.0	U	198		
COBALT		44.5		0.72		0.61	1	50.0	U	2.9		50.0	U	50.0	U	498		
COPPER	13	358		4.9		3.2		25.0	U	46.6		3.7		25.0	U	255		
IRON	1000	121000	1000	97.5		583		87.4		12200	Total	1900		85.8		1070		
LEAD	65	418		10.0	U	10.0	U	10.0	U	129		10.0	U	10.0	U	24.0		
MAGNESIUM		113000		40800		15300		22100		75100		4700		22000		22300		
MANGANESE		5110		203		73.1		63.6		1600		299		63.6		565		
MERCURY	1.4	0.92		0.20	U	0.20	U	0.20	U	1.8		0.20	U	0.20	U	0.99		
NICKEL	470	131		2.7		40.0	U	40.0	U	4.9		40.0	U	40.0	U	507		
POTASSIUM		25600		6310		17600		17100		7570		4790		16800		17200		
SELENIUM	5	35.0	U	35.0	U	35.0	U	35.0	U	13.0		35.0	U	35.0	U	52.1		
SILVER	3.2	1.5		10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	48.3		
SODIUM		38100		32700		14400		20800		8600		2770		20800		21500		
THALLIUM		22.1		25.0	U	25.0	U	25.0	U	9.5		25.0	U	25.0	U	52.2		
VANADIUM		156		50.0	U	2.0		50.0	U	6.9		50.0.	U	50.0	U	512	250	
ZINC	120	716		5.5		3.7		60.0	U	110	10	4.4		60.0	U	507		
CYANIDE	22	3.1		3.3		3.0		3.0		12.8		2.5		3.5		100		

		T404	T102	T103	T104	T105	T106	T107	T108	T109	T110	T111	T112
	Section 721.124	T101	2004IE01S02	2004JE01503	2004/E01S04	2004IE01205	2004IE01\$06	2004IE01S07	2004IF01S08	2004IR01S09	E310005-10	E310005-11	E310005-12
	Toxicity	20041201301	20041201002	20041201303	20041201304	20041203	20041201000	20041201001	20011201000		1		
	Characteristic	g/L											
	g/L												
	 	Resit	Resit	Reslt	Resit	Resit	Resit	Resit	Resit	Resit	Resit	Resit	Resit
1,2,4-Trichlorobenzene	5000												
1,2-Dichlorobenzene	17000									L			
1,3-Dichlorobenzene	_												
1,4-Dichlorobenzene	7500												
2,4,5-Trichlorophenol	400000							L					
2,4,6-Trichlorophenol	2000	1						 		Ļ			
2,4-Dichlorophenol										 			1270
2.4-Dimethylphenol		7.13			1080	147							1270
2,4-Dinitrophenol	130	 	 						-	 			
2,4-Dinitrotolene	130	 	-							-	 		
2,6-Dinitrotolene 2-Chloronaphthalene		+	 				 		-	 		· · · · · · · · · · · · · · · · · · ·	
2-Chlorophenol		+					 	 	<u> </u>	 			
2-Methylnaphthalene		39.2			277	110		 	 	1			460
2-Methylphenol	+	1	<u> </u>		882	53.4			1	<u> </u>			2000
2-Nitroaniline		†			1				1				
2-Nitrophenol		1								Ī			
3,3'-Dichlorobenzidine		T		L									
3-Nitroaniline			l										
4,6-Dinitro-2-methylphenol						L							
4-Bromophenyl phenyl ether		ļ				L				L			
4-Chloro-3-methylphenol			L		_					ļ			
4-Chloroaniline		L					ļ						
4-Chlorophenyl phenyl ether		ļ								ļ			
4-Methylphenol			ļ		3490	181	ļ	<u> </u>		Ļ		 	6120
4-Nitroaniline		_			ļ	ļ	_	<u> </u>		ļ			
4-Nitrophenol		 			40.4	100	ļ <u>-</u>	 		ļ	ļ		24.0
Acenaphthene		3.23			19.1	12 2	 	 	 				31.6
Acenaphthylene Anthracene		3.23			3.37	8.22 17.2			ļ				78.5
Benzo(a)anthracene					35	17.2		 -	1	 	<u> </u>	-	49.6
Benzo(a)pyrene		+		 		 	 		 -	 	 		30.5
Benzo(b)floranthene		 		6 27	5.4	 	 		1	 			40.6
Benzo(g.h,l)perylene		 											17.2
Benzo(k)floranthene		_		 	 		 -	 		 			14.8
Benzyl alcohol													
Bis(2-chloroethoxy)methane						L.	L						
Bis(2-chloroethyl)ether								ļ					
Bis(2-chloroisopropyl)ether				-		ļ				L		ļ	
Bis(2-ethylhexyl)phthalate		25.2	9 09			3.65	4.03	3 14	4.46	3.08	2.5		
Btyl benzyl phthalate		 	 		24.0	40 -				 		-	000
Carbazole Chrysene				5 82	61.9 5 32	16	<u> </u>	 					206
Dibenz(a,h)anthracene	-+	 		7.02	332	 	 -		 	+	 	 	45.3 6.25
Dibenzofran		6 16	 -	1	88.4	51	 		1	1	 		303
Diethyl phthalate		Rejected			50.4	Rejected	 	Rejected	 	Rejected	Rejected	Rejected	Rejected
Dimethyl phthalate		Rejected	 		 	Rejected	 	Rejected	 -	Rejected	Rejected	Rejected	Rejected
Di-n-btyl phthalate		1	 			1,	 	1.0,00.00			1,0,00.00	10,00.00	110,000,000
Di-n-octyl phthalate		†	1			1	1		i -	l			
Floranthene					33.1	18 1	 	1		 			-
Florene		7.85			156	69.6			T -	t	1		377
Hexachlorobenzene	130	I				L							
Hexachlorobtadiene	500												
Hexachlorocyclopentadiene	 _		 										
Hexachloroethane	3000	 	_	ļ		ļ							
Indeno(1,2,3-cd)pyrene		 	 	 	<u> </u>	 	 	<u> </u>	1	}	L		15.3
Isophorone	 		 	 		ļ. <u></u>	<u> </u>		<u> </u>	L		-	
Napthalene	2000	976	1		5370	1900	5.15			1	3.45	-	11700
Nitrobenzene	2000		 				 _ -	 		-	ļ		
N-Nitrosodi-n-propylamine N-Nitrosodipheylamine		+	 	 		 		 	ļ.—-	_	ļ		<u> </u>
Pentachlorophenol	100000	+	 	 		 	 		 	 			
Phenanthrene	100000	6.34	1		186	7E E	 	+	 	ļ	 	 	055
Phenol	 	9	 		4690	75.5 134		 		ļ			855
Pyrene		+	 		23.2	10.1	 	 -		 	 		12100
<u> </u>					23.2	10.1				<u> </u>	<u></u>		

Sample Number	Lab#s	Section 721.124	Soil Component of the Groundwater Ingestion Exposure Route Values			T102		T103		T104		T105		T106		T107		T108		T109		T110		T111		T112	
	Sample #'s	Toxicity	Class													19.11											
		Characteristic	ug/L														2 0										
		ug/L								Do lo			933						753								
	W																	No. of the									
Analyte			STATE OF THE STATE OF	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag												
Arsenic	Arsenic	5000	50	U		U		U		89.3	JK	U		U		U	L	U		U	L	U	L	U	L	U	
Barium	Barium	100000	2000	516	K	333		151		34.9	K	56.9	K	381		1180		6.88	K	882		899		35.5	K	48.2	K
Cadmium	Cadmium	1000	5	11.8	JK	7.6	JK	7.8	JK	28.6	K	U		8.6	JK	46.8	K	U		28.3	K	22.7	K	10.9	JK	11.8	JK
Chromium	Chromium	5000	100	13.6	J*	U		6.5	J	15.9	J	U		U		14.2	J*	U		U	*	U	*	U		18.1	J
Lead		5000	7.5	137		U		54.1	J	915		154		94.7	JK	450		U		64.9	J	53.7	J	113		430	
Selenium	Selenium	1000	50	U		U		U		U		U		U		215	JK	U	4	123	JK	U		U		U	
Silver	Silver	5000	50	U		U		U		U		U		U		U		U		U		U		U		U	

^{*} The duplicate analysis precision is not within control limits. The reported value is estimated.

J The identification of the analyte is acceptable; the reported value is an estimate.

K The identification of the analyte is acceptable; the reported value may be biased high. The actual value is expected to be less than the reported value L The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value. U Not detected

Figure 1 Site Location Map US Steel Coking Facility Joliet, IL

Figure 2 Site Area Map

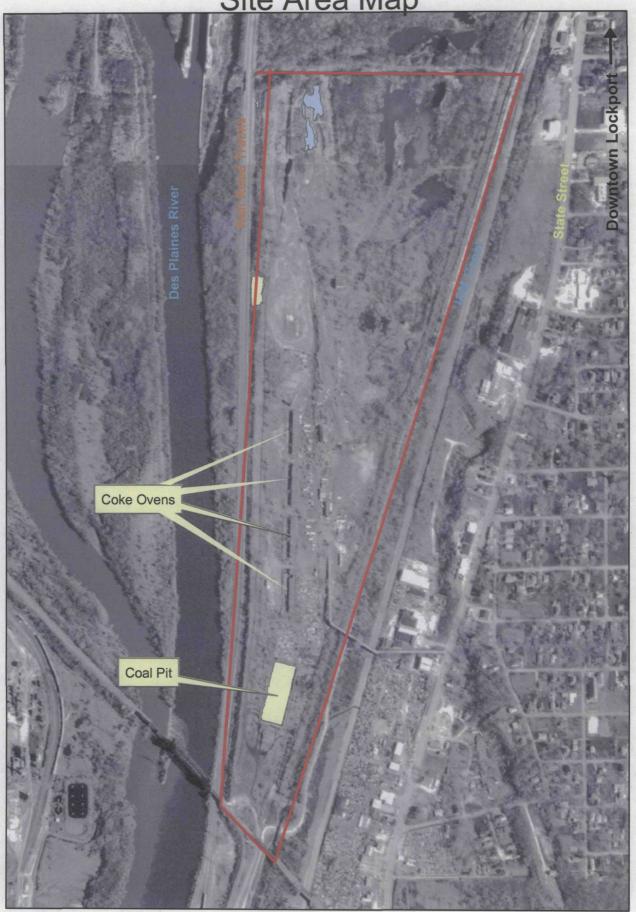


Figure 3 Soil Sample Locations





Figure 4 Waste Sample Locations





Figure 5
Sediment Sample Locations

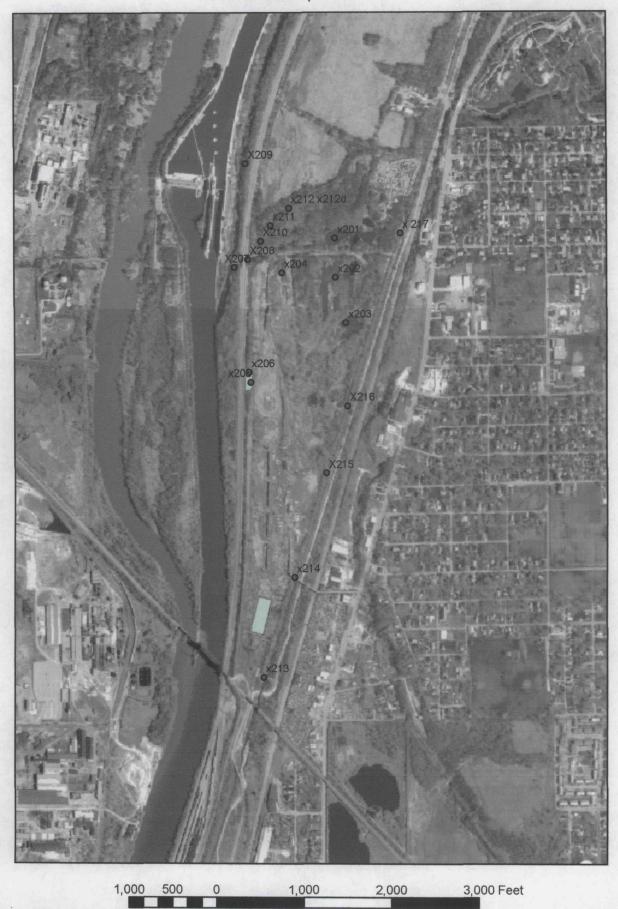
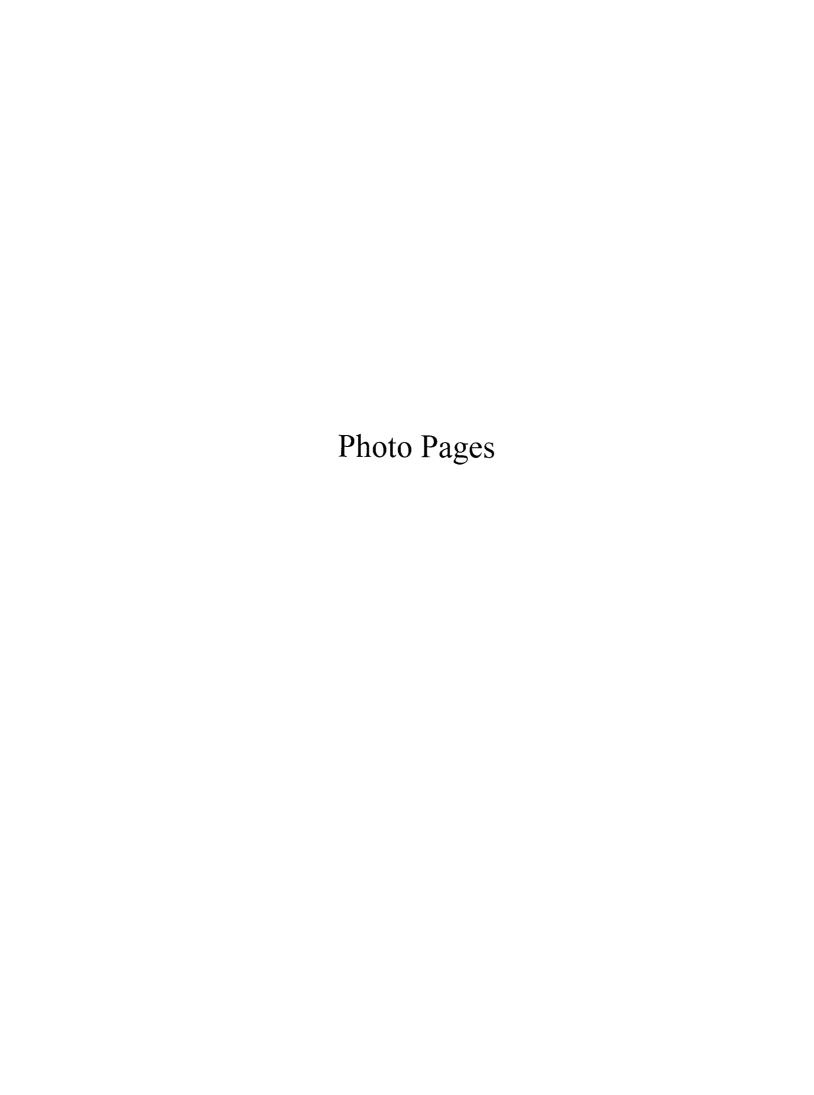




Figure 6
Surface Water Sample Locations







CERCLIS ID: ILD 980 704 845

COUNTY: Will

ATE: Oct 14, 2003

TIME: 1200

PHOTO BY: L. Range

PHOTO NUMBER: 1

ROLL NUMBER: NA

DIRECTION: North

from the approximately middle of the site, south of the quarries. X101 was collected from the 9 ft range of a black clay material.



DATE: Oct 14, 2003

TIME: 1330

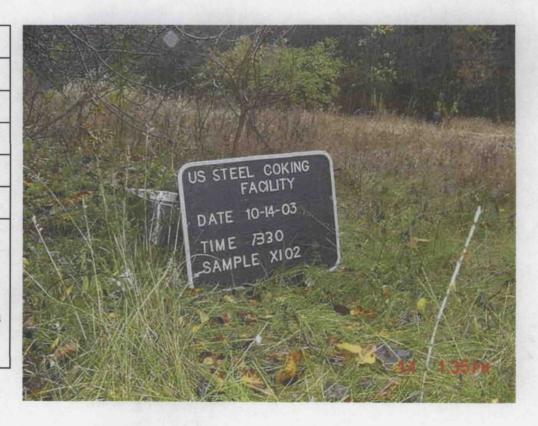
PHOTO BY: L. Range

PHOTO NUMBER: 2

ROLL NUMBER: NA

DIRECTION: South

COMMENTS: Photo taken of X102 collected from the edge of the gravel parking area between the two northern most quarries. The sample was taken from a brown loam. Refusal by y slag material.



CERCLIS ID: ILD 980 704 845 COUNTY: Will

_ATE: Oct 14, 2003

TIME: 1400

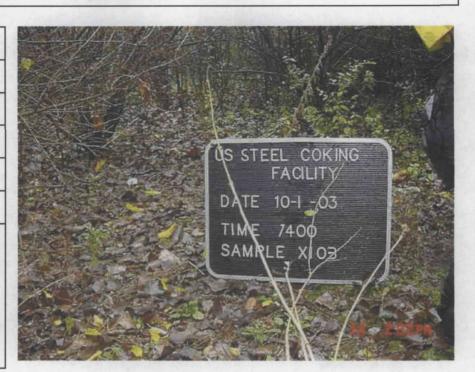
PHOTO BY: L. Range

PHOTO NUMBER: 3

ROLL NUMBER: NA

DIRECTION: South

COMMENTS: Photo taken of X103 which was collected from a wooded area in the middle west portion of the site. The sample was collected with an auger and consisted of a brown loam with organic material.



DATE: Oct 14, 2003

TIME: 1430

PHOTO BY: L. Range

PHOTO NUMBER: 4

ROLL NUMBER: NA

DIRECTION: West

COMMENTS: Photo taken of X104. Sample was collected with a hand auger from the northern portion of the site just east of the middle road. A lot of slag in the area. Sample consisted of a brown loam from

surface. Date and time are incorrect due to lack of "4s" in our case. Other case was with the other sampling team.



CERCLIS ID: ILD 980 704 845

COUNTY: Will

ATE: Oct 14, 2003

TIME: 1500

PHOTO BY: L. Range

PHOTO NUMBER: 5

ROLL NUMBER: NA

DIRECTION: South

COMMENTS: Photo taken of X105 collected near the eastern edge of the slag cliffs. Hand auger was used to collect the black cindery material intermixed with clay from about the 1 ft depth.



DATE: Oct 14, 2003

TIME: 1500

PHOTO BY: L. Range

PHOTO NUMBER: 6

ROLL NUMBER: NA

DIRECTION: South

COMMENTS: Photo taken of X106 (duplicate of X105) collected near the eastern edge of the slag cliffs. Hand auger was used to collect the black cindery material intermixed

h clay from about the 1 ft aepth. TCLP sample T102 was collected from this area also.



CERCLIS ID: ILD 980 704 845

COUNTY: Will

ATE: Oct 14, 2003

TIME: 1530

PHOTO BY: L. Range

PHOTO NUMBER: 7

ROLL NUMBER: NA

DIRECTION: Southwest

COMMENTS: Photo taken of X107 which was collected from the southern portion of the lowlying area which was littered with asphalt piles. The area was thick with vegetation. Sample was collected with a hand auger and the sample was collected from the surface. Sample consisted of a black/brown loam.



DATE: Oct 15, 2003

TIME: 0930

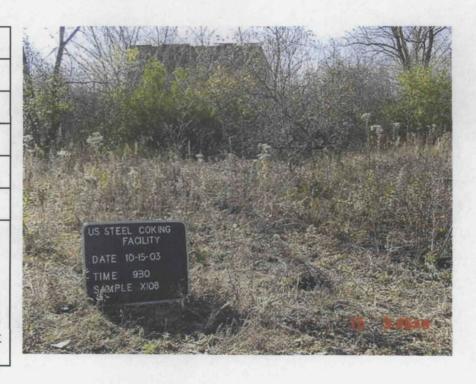
PHOTO BY: L. Range

PHOTO NUMBER: 8

ROLL NUMBER: NA

DIRECTION: South

COMMENTS: Photo taken of X108 which was collected north of the crusher in a flat area without trees. Slag present in the area. X108 was collected m a depth of 9ft from a black silty clay.



CERCLIS ID: ILD 980 704 845 COUNTY: Will

LATE: May 27, 2003

TIME: 1030

PHOTO BY: L. Range

PHOTO NUMBER: 9

ROLL NUMBER: NA

DIRECTION: Southwest

COMMENTS: Photo taken of X109. This sample was collected from southeast of the crusher in a low lying area with puddles of water and cattails with areas of exposed slag. X109 was collected from surface soil. TCLP T104 was collected from the same area.



DATE: Oct 15, 2003

TIME: 1100

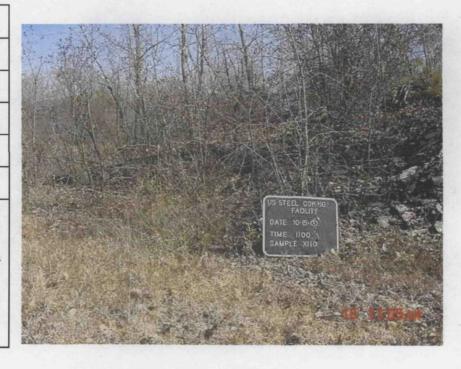
PHOTO BY: L. Range

PHOTO NUMBER: 12

ROLL NUMBER: NA

DIRECTION: East

COMMENTS: Photo taken of X110 which was collected just north of the low depression area from an area of slag and limestone with a hand auger. Sample consisted of an organic material with slag particles.



CERCLIS ID: ILD 980 704 845 COUNTY: Will

ATE: Oct 15, 2003

TIME: 1230

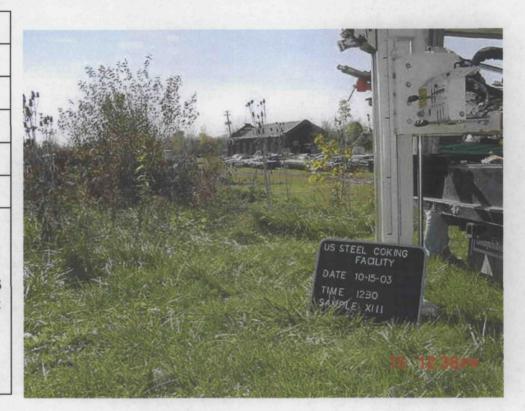
PHOTO BY: L. Range

PHOTO NUMBER: 13

ROLL NUMBER: NA

DIRECTION: Southwest

COMMENTS: Photo taken of soil sample X111. X111 was collected from a dark black clay material from a depth of 13 ft. This location was to the east of open area of cars.



DATE: Oct 15, 2001

TIME: 1300

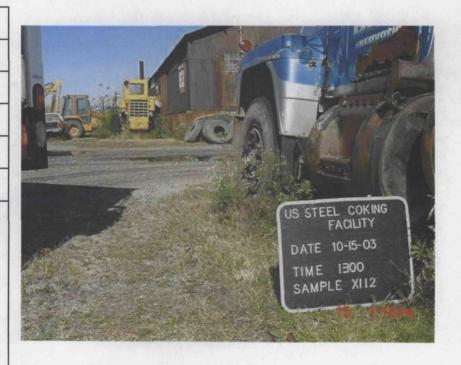
PHOTO BY: L. Range

PHOTO NUMBER: 14

ROLL NUMBER: NA

DIRECTION: South

comments: Photo taken of soil sample X112. X112 was collected from the north side of the maintenance building. Coal seeps can be seen on the rface. This sample was collected from the surface soil. T107 was collected from this location also.



CERCLIS ID: ILD 980 704 845 COUNTY: Will

LATE: Oct 15, 2003

TIME: 1330

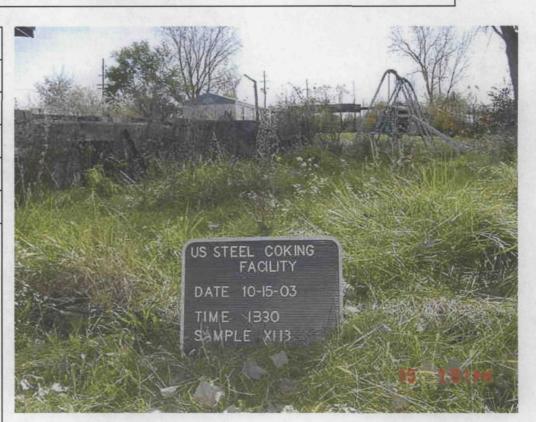
PHOTO BY: L. Range

PHOTO NUMBER: 15

ROLL NUMBER: NA

DIRECTION: South

COMMENTS: Photo taken of soil sample X113. This sample was collected in the area of an old foundation. Notice the trailer and swingset in the background. The sample consisted of a dark brown loam from the surface.



DATE: Oct 15, 2003

TIME: 1530

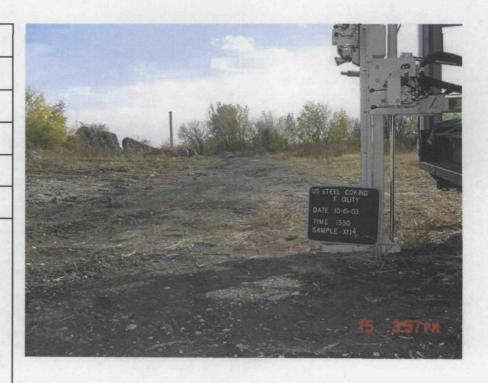
PHOTO BY: L. Range

PHOTO NUMBER: 16

ROLL NUMBER: NA

DIRECTION: South

COMMENTS: Photo taken of groundwater sample X114. X114 was located on top of the excavated material in the northwest corner of the site. X114 was collected from a depth of 6 inches of a black cinder material. Able to probe 24 ft. met refusal both empts. No coal tar discovered.



CERCLIS ID: ILD 980 704 845 COUNTY: Will

ATE: Oct 15, 2003

TIME: 1630

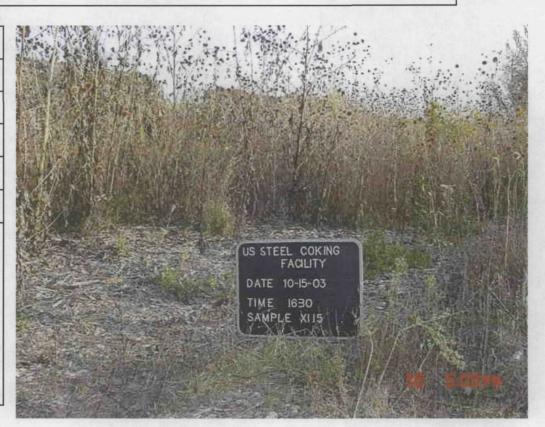
PHOTO BY: L. Range

PHOTO NUMBER: 17

ROLL NUMBER: NA

DIRECTION: East

COMMENTS: Photo taken of sample X115. X115 was collected from the top of the excavated material. X115 was collected from just west of the break in the slag cliff. X115 was collected from 23 ft and consisted of a black silty material.



DATE: Oct 16, 2003

TIME: 0900

PHOTO BY: L. Range

PHOTO NUMBER: 18

ROLL NUMBER: NA

DIRECTION: South

COMMENTS: Photo taken of X116 which is near the south area next to the road. X116 was collected from the 2 ft from a black cindery material. Just to the south of here is the dirt track.



CERCLIS ID: ILD 980 704 845 COUNTY: Will

LATE: Oct 16, 2003

TIME: 1000

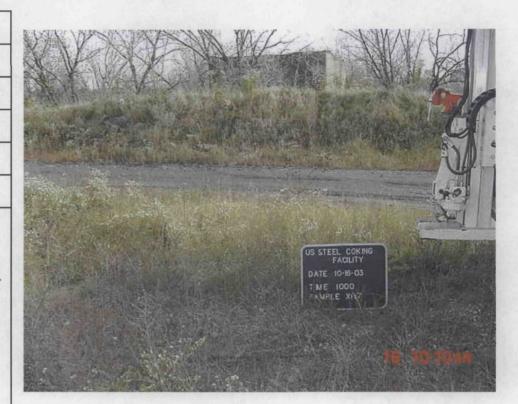
PHOTO BY: L. Range

PHOTO NUMBER: 19

ROLL NUMBER: NA

DIRECTION: East

COMMENTS: Photo taken of soil sample X117. X117 was collected from the eastern edge of the dirt track from a depth of 2 ft. Sample consisted of a black cindery material. Notice the crusher in the background for reference.



DATE: Oct 16, 2003

TIME: 1100

PHOTO BY: L. Range

PHOTO NUMBER: 20

ROLL NUMBER: NA

DIRECTION: East

COMMENTS: Photo taken of soil sample X118. X118 was collected from a depth of 13 ft from a course gray slag intermixed with a brown silty y. The coking ovens can be

seen in the background.



CERCLIS ID: ILD 980 704 845 COUNTY: Will

ATE: Oct 16, 2003

TIME: 1200

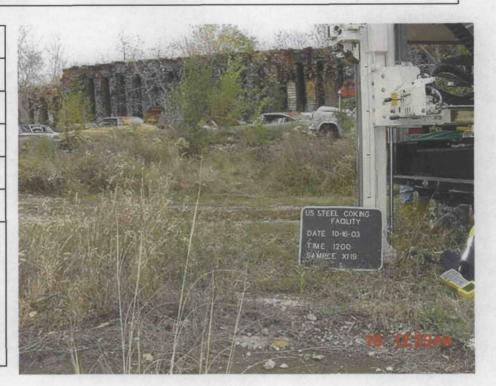
PHOTO BY: L. Range

PHOTO NUMBER: 21

ROLL NUMBER: NA

DIRECTION: East

COMMENTS: Photo taken of soil sample X119. X119 was collected from a black smelly clay from a depth of 17 ft. Location was to the west of the coking ovens near the southern portion of the site.



DATE: Oct 16, 2003

TIME: 1300

PHOTO BY: L. Range

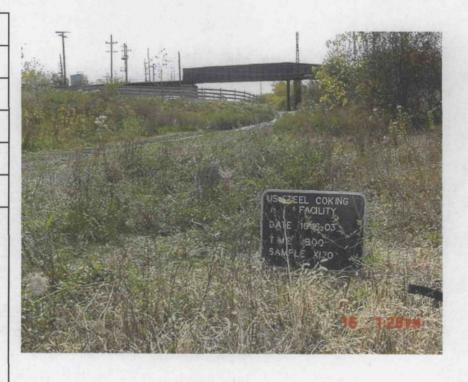
PHOTO NUMBER: 22

ROLL NUMBER: NA

DIRECTION: South

COMMENTS: Photo taken of soil sample X120. X120 was collected near the southern portion of the site, near the south entrance. I&M Trail bridge can be seen in the background. X120 was

llected from a depth of 2 ft om a material consisting of gray/green slag, black clay and black cinders. TCLP T109 also collected.



CERCLIS ID: ILD 980 704 845 COUNTY: Will

ATE: Oct 16, 2003

TIME: 1330

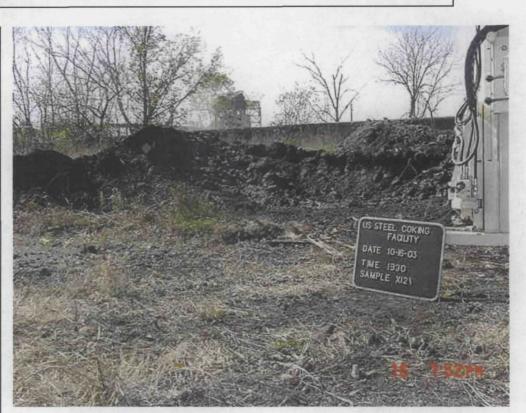
PHOTO BY: L. Range

PHOTO NUMBER: 23

ROLL NUMBER: NA

DIRECTION: West

comments: Photo taken of soil sample X121. X121 was collected from a depth of 4 ft from reddish cinders with a petroleum type odor. The location of this sample was near the eastern edge of the old coal pit. During the time of the sampling, the pit was being used to store equipment and sandblasting was occurring lide the pit.



DATE: Oct 16, 2003

TIME: 1400

PHOTO BY: L. Range

PHOTO NUMBER: 24

ROLL NUMBER: NA

DIRECTION: West

COMMENTS: Photo taken of soil sample X122. X122 was collected from 1 ft of a cindery slag material. TCLP T111 was also collected from this region. Notice the smokestack in the background.



CERCLIS ID: ILD 980 704 845 COUNTY: Will

ATE: Oct 16, 2003

TIME: 1500

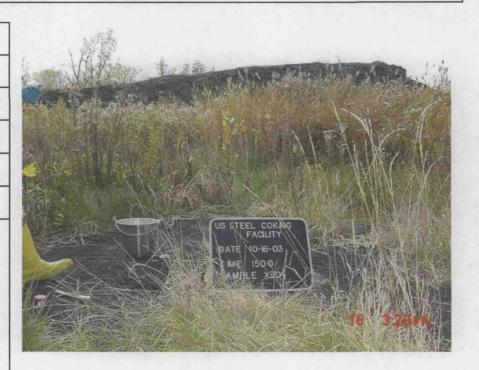
PHOTO BY: L. Range

PHOTO NUMBER: 25

ROLL NUMBER: NA

DIRECTION: West

COMMENTS: Photo taken of waste sample X304. X304 was collected from a coal tar seep located in the tree clear area near the middle of the site. TCLP T112 was also collected in this area. Sample consisted of slightly pliable coal tar.



DATE: Oct 14, 2003

TIME: 1200

PHOTO BY: B. Everetts

PHOTO NUMBER: 1

ROLL NUMBER: 1

DIRECTION: North

COMMENTS: Photo taken of surface water sample S201 and S201D (duplicate). In this quarry pond, depth was approximately 6 ft. Water surface was covered with duckweed. Sample collected with bacon bomb.



CERCLIS ID: ILD 980 704 845 COUNTY: Will

DATE: Oct 14, 2003

TIME: 1200

PHOTO BY: B. Everetts

PHOTO NUMBER: 2

ROLL NUMBER: 1

DIRECTION: North

comments: Photo taken of sediment sample X201 and X201D (duplicate). Depth to the sediment was approximately 6 ft. Sample consisted of a black, fine mucky sediment, mostly silt. Sample was taken from about 4 inches into the sediment.



DATE: Oct 14, 2003

TIME: 1250

PHOTO BY: B. Everetts

PHOTO NUMBER: 3

ROLL NUMBER: 1

DIRECTION: North

comments: Photo taken of surface water sample S202 and sediment sample X202. Only 20 inches of water was present in this portion of the quarry pond. S202 was collected by dipping jar directly into the water. X202 was collected with the ponar dredge. This aiment sample was dark brown silt with a slight amount of clay.



CERCLIS ID: ILD 980 704 845 COUNTY: Will

DATE: Oct 14, 2003

TIME: 1400

PHOTO BY: B. Everetts

PHOTO NUMBER: 4

ROLL NUMBER: 1

DIRECTION: Southwest

comments: Photo taken of surface water sample S203 and sediment sample X203. In this quarry pond, depth was approximately 2 ft and had a strong organic odor. Water was fairly clear. X203 was collected from the bottom and consisted of a dark brown balck silt with clay with an organic odor.

DATE: Oct 14, 2003

TIME: 1450

PHOTO BY: B. Everetts

PHOTO NUMBER: 5

ROLL NUMBER: 1

DIRECTION: West

comments: Photo taken of surface water sample S204 and sediment sample X204. This is the small depression area near the north end of the property. Area had about 2-6 inches of water. Water sample was a brown color with a coal tar odor. X204 was collected in the same area and consisted of a rk brown/black clayey silt.

Lud black spots of stained soil (coal tar). Sediment was collected from a depth of 0-4

inches. T103 was collected.





CERCLIS ID: ILD 980 704 845 **COUNTY:** Will

DATE: Oct 14, 2003

TIME: 1530

PHOTO BY: B. Everetts

PHOTO NUMBER: 6

ROLL NUMBER: 1

DIRECTION: West

COMMENTS: Photo taken of surface water sample S205 and sediment sample X205. This is the concrete lagoon. Very strong petroleum odor, sheen present on surface. Water collected with bacon bomb from a depth of 2 ft. X205 was collected with the ponar dredge. Depth of pit was 8 ft. Sediment consisted of sand and vel with small amount of clay. Very strong odor. T101 was collected here.

DATE: Oct 15, 2003

TIME: 1000

PHOTO BY: B. Everetts

PHOTO NUMBER: 7

ROLL NUMBER: 1

DIRECTION: East

COMMENTS: Photo taken of sediment sample X206 located on the west side of the concreter pit. This is along the drainage route. Sample was lected from 2 inches and asisted of a fine dark brown slag.





CERCLIS ID: ILD 980 704 845 COUNTY: Will

LATE: Oct 15, 2003

TIME: 1030

PHOTO BY: B. Everetts

PHOTO NUMBER: 8

ROLL NUMBER: 1

DIRECTION: West

comments: Photo taken of waste sample X301. Sample was collected from coal tar seep on the north portion of the site. Sample consisted of black coal tar with some black cindery material located underneath. Coal tar was softer after about 2 inches of excavation.



P¹ to 9 omitted due to mislabel.

DATE: Oct 15, 2003

TIME: 1100

PHOTO BY: B. Everetts

PHOTO NUMBER: 10

ROLL NUMBER: 1

DIRECTION: East

COMMENTS: Photo taken of waste sample X302. This sample was collected from along the northwest portion of the site. A very strong coal tar odor was present. Sample consisted of black coal tar with a yellowish residue. T104 was collected.



CERCLIS ID: ILD 980 704 845 COUNTY: Will

DATE: Oct 15, 2003

TIME: 1120

PHOTO BY: B. Everetts

PHOTO NUMBER: 11

ROLL NUMBER: 1

DIRECTION: West

COMMENTS: Photo taken of waste sample X303. Sample was collected from coal tar seep on the northwest portion of the site. Sample consisted of a brittle black coal tar with some black cindery material located underneath. T105 was also lected



DATE: Oct 15, 2003

TIME: 1250

PHOTO BY: B. Everetts

PHOTO NUMBER: 12

ROLL NUMBER: 1

DIRECTION: South

comments: Photo taken of sediment sample X207. This sample was collected from the side channel to the ship canal (Fraction Creek). The bottom was bedrock with some fine x207 and was located approximately 100 yards north of convergence.



CERCLIS ID: ILD 980 704 845 COUNTY: Will

LATE: Oct 15, 2003

TIME: 1300

PHOTO BY: B. Everetts

PHOTO NUMBER: 13

ROLL NUMBER: 1

DIRECTION: North

COMMENTS: Photo taken of sediment sample X208. Taken from the east side of the RR bridge from along the ditch (due to more sediment).



TE: Oct 15, 2003

TIME: 1320

PHOTO BY: B. Everetts

PHOTO NUMBER: 1

ROLL NUMBER: 2

DIRECTION: South

COMMENTS: Photo taken of sediment sample X209. This sample was collected north of X207 in the side channel. Sediment consisted of a brown/black fine silt with organic material.



CERCLIS ID: ILD 980 704 845 COUNTY: Will

DATE: Oct 15, 2003

TIME: 1340

PHOTO BY: B. Everetts

PHOTO NUMBER: 2

ROLL NUMBER: 2

DIRECTION: South

COMMENTS: Photo taken of sediment sample X210. Collected approximately 75 yards upgradient of RR bridge from the northern edge of the water and bank. Sample was collected from fine sediments.



TE: Oct 15, 2003

TIME: 1430

PHOTO BY: B. Everetts

PHOTO NUMBER: 3

ROLL NUMBER: 2

DIRECTION: South

COMMENTS: Photo taken of sediment sample X211. This sample was collected from the northern shore of Fraction Creek upgradient of X210. Sample consisted of gravel with fine silts with some sand.



CERCLIS ID: ILD 980 704 845 COUNTY: Will

LATE: Oct 15, 2003

TIME: 1450

PHOTO BY: B. Everetts

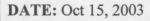
PHOTO NUMBER: 4

ROLL NUMBER: 2

DIRECTION: Northeast

comments: Photo taken of sediment sample X212 and X212 D (duplicate). Sample consisted of silty sand. Sample was thoroughly mixed in a stainless steel pan. Low flow of water in this area. This location was northwest of the auto junkyard located to the north of the site.





TIME: 1600

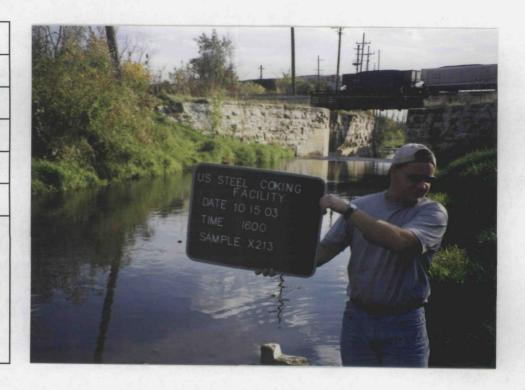
PHOTO BY: B. Everetts

PHOTO NUMBER: 5

ROLL NUMBER: 2

DIRECTION: South

COMMENTS: Photo taken of sediment sample X213. This sample was collected from the I&M Canal at the southern end of the site, just north of foot bridge. Sample consisted of a fine brown silt.



CERCLIS ID: ILD 980 704 845 COUNTY: Will

LATE: Oct 16, 2003

TIME: 0900

PHOTO BY: B. Everetts

PHOTO NUMBER: 6

ROLL NUMBER: 2

DIRECTION: North

COMMENTS: Photo taken of sediment sample X214. Sample was collected from I&M Canal near the steel bridge that enters site. Sample consisted of a mix of sand and silt with dark brown gravel with a small amount of clay. Total sediment depth was 6 inches.



TE: Oct 16, 2003

TIME: 0920

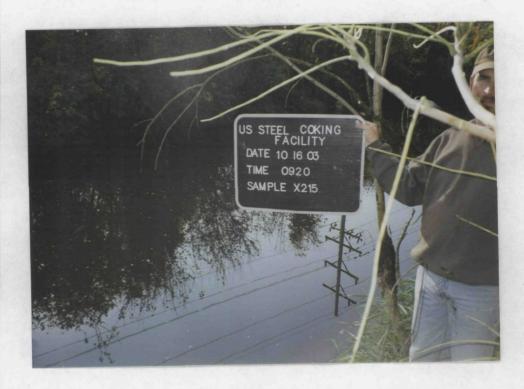
PHOTO BY: B. Everetts

PHOTO NUMBER: 7

ROLL NUMBER: 2

DIRECTION: South

COMMENTS: Photo taken of sediment sample X215.
Upgradient of X214. Collected from the I&M Canal and consisted of a dark brown clayey silt with some sand and gravel.



CERCLIS ID: ILD 980 704 845 COUNTY: Will

LATE: Oct 16, 2003

TIME: 1000

PHOTO BY: B. Everetts

PHOTO NUMBER: 8

ROLL NUMBER: 2

DIRECTION: South

COMMENTS: Photo taken of sediment sample X216.
Sample consisted of a silty sand with a small amount of gravel that was dark brown in color.
Sample has a sheen emitting from it to the water.



TE: Oct 16, 2003

TIME: 1030

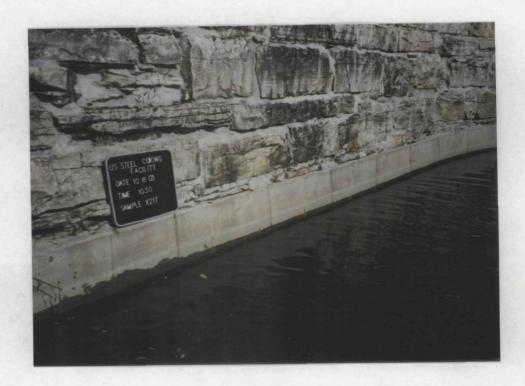
PHOTO BY: B. Everetts

PHOTO NUMBER: 9

ROLL NUMBER: 2

DIRECTION: South

COMMENTS: Photo taken of sediment sample X217. This sample was collected from the I&M Canal upgradient of the site. Sample consisted of a dark brown sandy silt with gravel with a slight organic odor.



CERCLIS ID: ILD 980 704 845 COUNTY: Will

ATE: Oct 15, 2003

TIME: 1755

PHOTO BY: L. Range

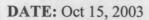
PHOTO NUMBER: 1

ROLL NUMBER: NA

DIRECTION: North

comments: Photo taken of the concrete pit facing the northwest corner. The concrete is visibly stained. The low area in the concrete was is the area in which the pit overflows during any type of rain. There is no fence to keep anything from falling into the pit.





TIME: 1755

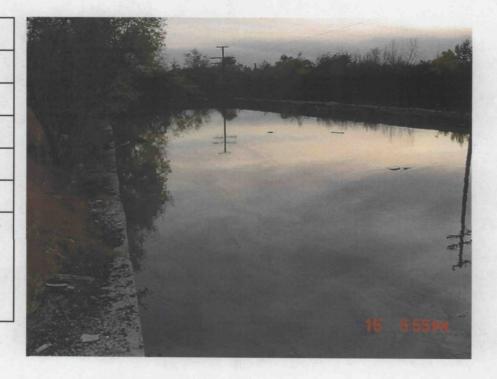
PHOTO BY: L. Range

PHOTO NUMBER: 2

ROLL NUMBER: NA

DIRECTION: South

COMMENTS: Photo taken of the concrete pit facing the south. Notice the sheen which is apparent in the middle of the photo.



CERCLIS ID: ILD 980 704 845 COUNTY: Will

TE: Oct 15, 2003

TIME: 1755

PHOTO BY: L. Range

PHOTO NUMBER: 3

ROLL NUMBER: NA

DIRECTION: West

COMMENTS: Photo taken of the east side of the concrete pit. Notice the sheen apparent on the water surface.

